III. FINANCIALS









I am proud to join NSF Acting Director Dr. Arden Bement in presenting the National Science Foundation's *FY 2004 Performance and Accountability Report*. This report is an integrated presentation of our programmatic and management achievements over the past year and our financial status as of September 30, 2004.

NSF's continuing quest to provide the highest quality of business services to our customers, stakeholders and staff is evident in our commitment to effective internal controls, prompt and streamlined award processes and reliable and timely financial data to support good management decisions. NSF's high quality, responsive electronic communications and processing systems are the backbone of our operations and the key to our success in interacting and servicing our research and education communities efficiently and effectively. Some notable FY 2004 achievements include the following:

- NSF received over 14,000 cash requests and over 6,500 quarterly expense reports electronically; all were processed by only two employees because NSF's grant financial functions are fully automated.
- NSF was able to meet accelerated reporting requirements a year earlier than required; the
 year-end report was produced 45 days after the close of the fiscal year compared to 120
 days in previous years.
- This year, NSF was able to automate the new Government-wide financial statements in conjunction with our agency statements; this has been recognized by the Department of Treasury as a best practice.
- NSF developed a new web-based "ReportWeb" database that allows managers and staff "24/7" access to timely and reliable financial information and grant award system reports. "ReportWeb" is updated as frequently as every hour depending on the data and is directly accessible at workstations. This new electronic report system has increased the efficiency of report delivery and benefited the agency through savings realized from reduced printing and storage costs.

Providing useful, pertinent and timely information to both our internal decision-makers and external customers remains a high priority for the agency. For the third consecutive year, our annual *Performance Highlights* brochure was ranked among the Top 10 by the League of American Communication Professionals in a national competition of annual reports. In a recent report issued by IBM's Center for the Business of Government, NSF was commended with an

"A+" rating for exemplary public accountability reporting. We are also proud to have again received two "green" ratings from the Office of Management and Budget, for successful achievement in the financial performance and electronic government initiatives of the President's Management Agenda (PMA). NSF has sustained our "green" rating in financial performance for nine consecutive Scorecards.

I am pleased to report that the agency received an unqualified audit opinion. We also note that the audit report conveyed two reportable conditions – post-award administration and contract monitoring. NSF management believes the audit findings do not support either of these determinations of reportable conditions. Of particular note, the Foundation has made significant progress in developing and implementing a grant administration program that is considered a best practice in the federal arena. Additional information can be found in Management's Response to the Independent Auditors' Report.

NSF's long-standing practice of embracing advanced technology and leading edge business practices has served us well. NSF continues to face the future in a position of operational strength thanks to our sound financial management, our commitment to continuous improvement in business practices and, most importantly, to the extraordinary talent and commitment of our staff. For NSF, excellence in financial management has enabled the agency to pursue critical investments in science and engineering research and education that will ensure our children will live in a secure homeland, enjoy continued economic prosperity and maintain a high quality of life.

Thomas N. Cooley

November 10, 2004



National Science Foundation

Financial Statements as of and for the years ended September 30, 2004 and 2003

National Science Foundation Balance Sheet

As of September 30, 2004 and 2003

(Amounts in Thousands)

ASSETS		<u>2004</u>	<u>R</u>	2003 estated (Note 14)
Intragovernmental Fund Balance With Treasury (Note 2) Accounts Receivable (Note 3) Advances (Note 4) Total Intragovernmental Assets Cash and Other Monetary Assets	-	7,543,452 23,875 38,389 7,605,716	\$ -	7,083,797 18,247 18,557 7,120,601
Accounts Receivable, Net (Note 3) Advances (Note 4) General Property, Plant and Equipment, Net (Note 5)		9,333 97 73,423 240,443	_	202 66,610 230,777
Total Assets \$	=	7,929,034	\$ _	7,424,919
LIABILITIES				
Intragovernmental Liabilities Advances From Others Employer Contributions & Other (Note 7) FECA Employee Benefits (Notes 8 and 9) Other Intragovernmental Liabilities (Note 12) Total Intragovernmental Liabilities Accounts Payable Accrued Liabilities – Grants, Payroll & Other (Note 7) FECA Employee Benefits (Notes 8 and 9) Accrued Annual Leave (Note 8) Total Liabilities Commitments and Contingencies (Note 12)	_ _	23,411 557 280 3,000 27,248 43,519 311,719 1,465 12,162 396,113	\$ -	41,933 396 264 - 42,593 68,420 255,923 1,649 11,120 379,705
NET POSITION				
Unexpended Appropriations Cumulative Results of Operations	_	7,097,014 435,907	=	6,555,803 489,411
Total Net Position	_	7,532,921	-	7,045,214
Total Liabilities and Net Position \$	\$ _	7,929,034	\$	7,424,919

The accompanying notes are an integral part of these statements.

National Science Foundation Statement of Net Cost For the Year Ended September 30, 2004

(Amounts in Thousands)

Program Costs		<u>2004</u>
People		
Individuals	\$	651,050
Institutions		202,087
Collaborations		428,260
Total People Program Costs		1,281,397
Less: Earned Revenue	_	20,289
Net People Program Cost	-	1,261,108
Ideas		
Fundamental Science & Engineering		2,121,465
Centers		297,569
Capability Enhancements	_	221,127
Total Ideas Program Costs		2,640,161
Less: Earned Revenue	_	62,110
Net Ideas Program Cost		2,578,051
Tools		
Large Facilities		536,163
Infrastructure and Instrumentation		280,542
Polar Tools, Facilities and Logistics		245,232
Federally Funded Research & Development Centers	_	212,388
Total Tools Program Costs		1,274,325
Less: Earned Revenue	_	13,341
Net Tools Program Cost		1,260,984
Net Cost of Operations (Note 10)	\$ _	5,100,143

National Science Foundation Statement of Net Cost

For the Year Ended September 30, 2003 (Amounts in Thousands)

Program Costs

Program Costs		2002
People		<u>2003</u>
Intragovernmental		
Program Cost	\$	2,363
Salary & Expense, NSB and Inspector General Cost	_	699
Total Intragovernmental Cost	_	3,062
With the Public	_	,
Program Cost		865,126
Salary & Expense, NSB and Inspector General Cost		30,975
Total Public Cost	_	896,101
Total People Program Cost		899,163
Less: Intragovernmental Earned Revenues		22,880
Net People Program Cost	_	876,283
Ideas		
Intragovernmental		
Program Cost		3,188
Salary & Expense, NSB and Inspector General Cost		3,414
Total Intragovernmental Cost	_	6,602
With the Public	_	
Program Cost		2,464,532
Salary & Expense, NSB and Inspector General Cost		84,806
Total Public Cost	_	2,549,338
Total Ideas Program Cost		2,555,940
Less: Intragovernmental Earned Revenues		42,003
Net Ideas Program Cost	_	2,513,937
Tools		
Intragovernmental		
Program Cost		113,396
Salary & Expense, NSB and Inspector General Cost	_	34,295
Total Intragovernmental Cost	_	147,691
With the Public	_	_
Program Cost		1,156,195
Salary & Expense, NSB and Inspector General Cost	_	42,174
Total Public Cost	_	1,198,369
Total Tools Program Cost		1,346,060
Less: Intragovernmental Earned Revenues	_	28,509
Net Tools Program Cost	_	1,317,551
Net Cost of Operations (Note 10)	\$ _	4,707,771

The accompanying notes are an integral part of these statements.

National Science Foundation Statement of Changes in Net Position For the Year Ended September 30, 2004 (Amounts in Thousands)

<u>2004</u>

	C	Cumulative Results of Operations	S	Unexpended Appropriations
Beginning Balances				
Beginning Balances	\$	489,411	\$	6,555,803
Budgetary Financing Sources				
Appropriations Received (Net of Offsetting Receipts)		-		5,610,950
Appropriations Transferred In/(Out)		-		11,250
Other Adjustments		-		(67,712)
Appropriations Used		5,013,277		(5,013,277)
Non-exchange Revenue and Other		23		-
Donations		23,915		-
Appropriated Earmarked Receipts Transferred In		569		-
Other Financing Sources				
Transfers-in/out Without Reimbursement		303		-
Imputed Financing from Costs Absorbed by Others		8,552		-
Total Financing Sources	•	5,046,639		541,211
Net Cost of Operations	-	5,100,143		
Ending Balances	\$	435,907	\$	7,097,014

National Science Foundation Statement of Changes in Net Position For the Year Ended September 30, 2003 (Amounts in Thousands)

2003 Restated (Note 14)

		Cumulative Results of Operations	Unexpended <u>Appropriations</u>
Beginning Balances			
Beginning Balances, as adjusted	\$	444,277	\$ 5,902,868
Budgetary Financing Sources			
Appropriations Received (Net of Offsetting Receipts))	-	5,344,692
Appropriations Transferred In/(Out)		-	13,143
Other Adjustments		-	(67,254)
Appropriations Used		4,637,646	(4,637,646)
Non-exchange Revenue		49	-
Donations		42,113	-
Appropriated Earmarked Receipts Transferred In		65,343	-
Other Financing Sources			
Transfers-in/out Without Reimbursement		54	-
Imputed Financing from Costs Absorbed by Others		7,700	-
Total Financing Sources		4,752,905	652,935
Net Cost of Operations		4,707,771	
Ending Balances	\$	489,411	\$ 6,555,803

National Science Foundation Statement of Budgetary Resources For the Years Ended September 30, 2004 and 2003 (Amounts in Thousands)

Budgetary Resources

Budgetary Resources		2004		2003
Budgetary Authority:		<u> 2004</u>		<u>2003</u>
Appropriations Received	\$	5,635,457	\$	5,452,197
Net Transfers	Ψ	11,250	Ψ	13,143
Unobligated Balance – Beginning of Period		298,368		304,817
Spending Authority from Offsetting Collections:		_, ,,,,,,,,		201,021
Earned:				
Collected		90,247		75,568
Receivable from Federal Sources		5,629		18,062
Change in Unfilled Customer Orders:				
Advance Received		(18,522)		(58,598)
Without Advance from Federal Sources		33,975		73,755
Subtotal		111,329		108,787
Recoveries of Prior Year Obligations		61,168		65,399
Permanently Not Available		(67,709)		(67,271)
Total Budgetary Resources (Note 11)	\$	6,049,863	\$	5,877,072
			•	
Status of Budgetary Resources				
Obligations Incurred:				
Direct	\$	5,759,154		5,469,724
Reimbursable		111,565		108,920
Subtotal		5,870,719		5,578,644
Unobligated Balance:				
Apportioned		85,230		202,221
Unobligated Balance Not Available		93,914		96,207
Total Status of Budgetary Resources	\$	6,049,863	\$	5,877,072
Relationship of Obligations to Outlays				
Net Obligated Balance – Beginning of Period Net Obligated Balance – End of Period	\$	6,784,209	\$	6,114,623
Accounts Receivable		(23,875)		(18,247)
Unfilled Customer Orders from Federal Sources		(110,236)		(76,261)
Undelivered Orders		7,148,677		6,561,867
Accounts Payable		349,742		317,088
Total Net Obligated Balance – End of Period	\$	7,364,308	\$	6,784,447
Outlays:				
Disbursements	\$	5,189,847	\$	4,751,604
Collections		(71,725)		(16,970)
Subtotal		5,118,122		4,734,634
Less: Offsetting Receipts		23,938		42,162
Net Outlays	\$	5,094,184	\$	4,692,472

The accompanying notes are an integral part of these statements.

National Science Foundation Statements of Financing For the Years Ended September 30, 2004 and 2003 (Amounts in Thousands)

Resources Used to Finance Activities Budgetary Resources Obligated		<u>2004</u>		<u>2003</u>
	\$	5,870,719 \$		5,578,644
Less: Spending Authority for Offsetting	Ψ	J,070,717 \$,	3,370,044
Collections and Recoveries		172,497		174,186
Obligations Net of Offsetting Collections and Recoveries	_	5,698,222	_	5,404,458
Less: Offsetting Receipts		23,938		42,162
Net Obligations	_	5,674,284	_	5,362,296
Other Resources		3,074,204		3,302,270
Transfers-in		303		54
Imputed Financing		8,552		7,700
Net Other Resources Used to Finance Activities	_	8,855	_	7,754
Net Other Resources Oscu to Finance Activities	_	0,033	_	7,734
Total Resources Used to Finance Activities		5,683,139		5,370,050
Resources Used to Finance Items Not Part of the Net Cost of Operate Change in Budgetary Resources Obligated for Goods,	tior	ns		
Services and Benefits Ordered But Not Yet Provided		(598,238)		(698,707)
Resources that Fund Expenses Recognized in Prior Periods		(146)		369
Budgetary Offsetting Collections and Receipts that		, ,		
Do Not Affect Net Cost of Operations		23,938		42,162
Resources that Finance the Acquisition of Assets		(27,078)		(24,029)
Total Resources Used to Finance Items Not Part of the Net Cost of				
Operations		(601,524)		(680,205)
operations.	_	(001,521)	-	(000,200)
Total Resources Used to Finance Net Cost of Operations		5,081,615		4,689,845
Components of the Net Cost of Operations that will not Require or Generate Resources in the Current Period	_			
Components Requiring or Generating Resources in Future Period	ls	1.050		~ 1.
Other The last of	_	1,058	_	516
Total Components of Net Cost of Operations that will		1.050		516
Require or Generate Resources in Future Periods (Note 13)		1,058		516
Components Not Requiring or Generating Resources				
Depreciation and Amortization		17,396		17,314
Revaluation of Assets or Liabilities		17,390		17,314
Other		74		79
Total Components of Net Cost of Operations that will not	_		-	
Require or Generate Resources		17,470		17,410
require of Generale Resources	_	17,470	-	17,410
Total Components of Net Cost of Operations that will not				
Require or Generate Resources in the Current Period		18,528		17,926
Require of Generale Resources in the Current Letwa	_	10,520	-	11,720
Net Cost of Operations (Note 10)	\$_	5,100,143	\$_	4,707,771

The accompanying notes are an integral part of these statements.

Note 1. Summary of Significant Accounting Policies

A. Reporting Entity

The National Science Foundation (NSF or Foundation) is an independent Federal agency created by the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75). Its aim is to promote and advance scientific progress in the United States. NSF initiates and supports basic scientific research and research fundamental to the engineering process and programs to strengthen scientific and engineering research potential. NSF also supports science and engineering education programs at all levels in all fields of science and engineering. NSF funds research and education in science and engineering by awarding grants and contracts to educational and research institutions in all parts of the United States. NSF, by law, cannot operate research facilities. By award, NSF enters into relationships to fund the research operations conducted by grantees.

NSF is led by a presidentially-appointed director and the policy-making National Science Board (NSB). The NSB, composed of 24 members, represents a cross section of American leaders in science and engineering research and education, who are appointed by the President for six-year terms. The NSF Director is a member *ex officio* of the Board.

NSF is authorized to accept and use U.S. and foreign funds into the NSF Donation Account per the General Authority of the Foundation as found in 42 U.S.C. 1862 Section 3 (a)(3), "to foster the interchange of scientific and engineering information among scientists and engineers in the United States and foreign countries, and also 42 U.S.C. 1870 Section 11 (f) which allows NSF to receive and use funds donated by others. Donations are received from foreign governments, private companies, academic institutions, non-profit foundations, and individuals. Donated funds are either earmarked for a specific NSF program or unrestricted, which can be used on one or more of the general purposes of the foundation. NSF maintains four interest bearing accounts; interest earned on the bank deposits are used for the same purpose as the principal donations. When needed for program support donations are transferred into the trust fund account at the U.S. Treasury. Funds are made available for obligations as necessary to support NSF programs.

B. Basis of Presentation

These financial statements have been prepared to report the financial position and results of operations of NSF as required by the Chief Financial Officers Act of 1990, the Government Management Reform Act of 1994, the Reports Consolidation Act of 2000, and the Office of Management and Budget (OMB) Bulletin No. 01-09, *Form and Content of Agency Financial Statements*. They have been prepared from the books and records of NSF in accordance with generally accepted accounting principles in the United States of America. These statements are therefore different from the financial reports, also prepared by NSF pursuant to OMB directives that are used to monitor and control NSF's use of budgetary resources.

The fiscal year (FY) 2006 *Budget of the United States* (also known as the President's Budget) with actual numbers for FY 2004 was not published at the time that these financial statements were issued. The President's Budget is expected to be published in February 2005 and will be

available from the United States Government Printing Office. There are no differences in the actual amounts for FY 2003 that have been reported in the FY 2005 Budget of the United States and the actual numbers that appear in the FY 2003 Statement of Budgetary Resources.

C. Basis of Accounting

The accompanying financial statements have been prepared using the accrual method of accounting in addition to recognizing certain budgetary transactions. Under the accrual method, revenues are recognized when earned and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. Budgetary accounting facilitates compliance with legal constraints and controls over the use of federal funds. NSF records grant expenses from expenditure reports submitted by the grantees.

D. Revenues and Other Financing Sources

NSF receives the majority of its funding through appropriations contained in the Departments of Veterans Affairs, Housing and Urban Development, and Independent Agencies Appropriations Act. NSF receives both annual and multi-year appropriations that may be expended, within statutory limits. Additional amounts are obtained through reimbursements for services provided to and allocation transfers from other federal agencies and through receipts to the donation account. Also, NSF receives interest earned on overdue receivables and excess cash advances to grantees. The interest earned on overdue receivables is returned to the Treasury. Interest earned on excess cash advances to grantees is sent directly to the Department of Health and Human Services in accordance with OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Non Profit Organizations*.

Appropriations are recognized as a financing source at the time the related "funded" program or administrative expenses are incurred. Appropriations are also recognized when used to purchase property, plant and equipment. "Unfunded" liabilities result from liabilities not covered by budgetary resources and will be paid when future appropriations are made available for these purposes. Donations are recognized as revenues when funds are received. Revenues from reimbursable agreements are recognized when the services are provided and the related expenditures are incurred. Reimbursable agreements are mainly for grant administrative services provided by NSF on behalf of other federal agencies.

E. Fund Balance with Treasury and Cash

Cash receipts and disbursements are processed by the Treasury. The Fund Balance with Treasury is composed primarily of appropriated funds that are available to pay current liabilities and finance authorized purchase commitments, but also includes non-appropriated funding sources from donations and other revenue received from an NSF cooperative agreement to register Internet domain names.

NSF has also established commercial bank accounts to hold some donated funds in trust, in interest bearing accounts as permitted by the contributors. These funds are collateralized by the bank through the U.S. Treasury.

F. Accounts Receivable, Net

Accounts Receivable consists of amounts due from governmental agencies, private organizations, and individuals. NSF establishes an allowance for accounts receivable from private sources that are deemed uncollectible, but regards amounts due from other federal agencies as fully collectible. In FY 2004, OMB issued M-04-10: *Memorandum on Debt Collection Improvement Act Requirements*, which reminded agencies of their responsibility to comply with the policies for writing off and closing out debt. Based on this memo, NSF has now incorporated the policy of writing off delinquent debt more than two years old. NSF also analyzes each account independently to assess collectability and the need for an offsetting allowance or write-off.

G. Advances

Advances consist of advances to grantees, contractors, federal agencies and employees. Advance payments are made to grant recipients so that recipients may incur expenses related to the approved grant. Payments are only made within the amount of the recorded grant obligation and are intended to cover immediate cash needs. Total grant expenditures for the year includes an estimate of fourth quarter amounts due and payable to grantees. The estimate is compiled using historical grantee expenditure data. For those grantees with advance payments exceeding expenditures, the aggregate difference is reported as an advance. Additionally, for those grantees with expenditures exceeding advance payments, the aggregate difference is reported as a grant liability. Advances to contractors are payments made in advance of incurring expenses. Advances to employees are related to travel. Advances are reduced when documentation supporting the expenditures is received. Advances to federal agencies are only issued when agencies are operating under working capital funds and are unable to incur costs on a reimbursable basis.

H. General Property, Plant and Equipment (PP&E)

PP&E

NSF capitalizes acquisitions with costs exceeding \$25,000 and useful lives of two or more years. Acquisitions not meeting these criteria are recorded as operating expenses. NSF currently reports capitalized PP&E at original acquisition cost; assets acquired from General Services Administration's (GSA) excess property schedules are recorded at the value assigned by the donating agency; assets transferred in from other agencies are at the cost recorded by the transferring entity for the asset net of accumulated depreciation or amortization. Completed buildings are transferred from CIP to Real Property at NSF's acceptance. Depreciation expense is calculated using the straight-line method. The economic life classifications for capitalized assets are as follows:

Equipment

5 years - computers and peripheral equipment, fuel storage tanks,

laboratory equipment, and vehicles

7 years - communications equipment, office furniture and equipment,

pumps and compressors

10 years - generators, Department of Defense equipment

Aircraft and Satellites

7 years - aircraft, aircraft conversions, and satellites

Buildings and Structures

31.5 years - buildings and structures placed in service prior to 1993

39 years - buildings and structures placed in service after 1993

Internal Use Software

5 years - internal use software

Leasehold Improvements

The economic life of Leasehold Improvements is amortized over the number of years remaining on the occupancy agreement for the NSF headquarters building. In FY 2004, Leasehold Improvements completed during the year were amortized over 9 years. This represents the remaining years on NSF's lease with GSA.

The PP&E balance consists of Equipment, Aircraft and Satellites, Buildings and Structures, Leasehold Improvements, and Construction in Progress. Costs are accumulated in construction in progress until the complete project receives NSF acceptance and at that time, project costs are capitalized and depreciated over the respective useful life of the assets. These balances are comprised of PP&E maintained "in-house" by NSF to support agency operations and PP&E under the U.S. Antarctic Program (USAP). The majority of USAP property is currently the custodial responsibility of Raytheon Technical Services Company, the NSF contractor for the program. Additionally, the U.S. Navy's Space and Naval Warfare Center, and the Air National Guard 109th also have custodial responsibility for some USAP property.

Office Space

The NSF headquarters buildings are leased through the GSA under an occupancy agreement. The cancellation clause within the agreement allows NSF to terminate use with a 120 day notice. NSF is billed by GSA for the leased space as rent based upon estimated lease payments made by GSA plus an administrative fee. The cost of the headquarters building is not capitalized by NSF. The cost of leasehold improvements performed by GSA is financed with NSF appropriated funds. The leasehold improvements are capitalized by NSF as they are transferred from CIP.

Amortization is calculated using the straight-line method over the lesser of their useful lives or the unexpired lease term.

Internal Use Software

NSF controls, values and reports purchased or developed software as tangible property assets, in accordance with the Statement of Federal Financial Accounting Standards (SFFAS) No. 10 – "Accounting for Internal Use Software." NSF identifies software investments as accountable property for items that, in the aggregate, cost \$500,000 or more to purchase, develop, enhance or modify a new or existing NSF system. Software projects that are not completed at year end and are expected to exceed the capitalization threshold are recorded as software in development. All internal use software meeting the capitalization threshold is amortized over a five-year period using the straight-line method.

Assets Owned by NSF in the Custody of Other Entities

NSF awards grants, cooperative agreements, and contracts to various organizations, including colleges and universities, non-profit organizations, state and local governments, Federally Funded Research and Development Centers (FFRDC), and private entities. The funds provided may be used in certain cases to purchase or construct Property, Plant and Equipment (PP&E) to be used for operations or research on projects or programs sponsored by NSF. In these instances, NSF funds the acquisition of property, but transfers control to these entities. NSF's authorizing legislation specifically prohibits it from operating such property directly. In practice, NSF's ownership interest in such PP&E is similar to a reversionary interest. To address the accounting and reporting of these assets, specific guidance was sought by NSF and provided by the Federal Accounting Standards Advisory Board (FASAB). This guidance stipulated that NSF should: (i) disclose the value of such PP&E held by others in its financial statements based on information contained in the audited financial statements of these entities (if available). Where separate audited amounts are not available for a specific entity, NSF should name the entity and note that these amounts are unavailable; and (ii) report information on costs incurred to acquire the research facilities, equipment, and platforms in the Research and Human Capital Activity costs as required by the Statement of Federal Financial Accounting Standards No. 8, Supplementary Stewardship Reporting.

I. Advances from Others

Advances from Others consist of prior year amounts obligated and advanced by other federal entities to NSF for grant administration and other services to be furnished under reimbursable agreements. Balances at the end of the year are adjusted by an allocated amount from the fourth quarter grantee expenditure estimate described under Note 1G, Advances. The amount to be allocated is based on a percentage of the reimbursable grant expenditures, by partner agencies to NSF, to the total grant expenditures.

J. Accounts Payable

Accounts Payable consists of liabilities to commercial vendors, contractors, and disbursements in transit. Accounts payable to commercial vendors are expenses for goods and services received but

not yet paid by NSF at the end of the fiscal year. At year end, NSF accrues for the amount of estimated unpaid expenses to commercial vendors. Contract liabilities are estimated expenses over and above the amount of advances given to contractors. At year end, NSF accrues the amount of estimated expenses not covered by advances given to contractors. Intra-governmental accounts payable consists of disbursements in transit, recorded by NSF but not paid by Treasury.

K. Other Liabilities

Other liabilities consist of grant accruals, accrued payroll, benefits, and income taxes withheld. Grant liabilities are estimated grantee expenses over and above the amount of advances given to grantees. At year end, NSF accrues for the amount of estimated grantee expenses not covered by advances given to grantees. Accrued payroll, benefits, and income taxes withheld relate to services rendered by NSF employees but not yet paid. At year end, NSF accrues the actual amount of wages and benefits earned, but not yet paid, and income tax withholdings. In FY 2004, NSF outsourced its payroll services to the Department of the Interior.

L. Annual, Sick, and Other Leave

Annual leave is accrued as it is earned, and the accrual is reduced as leave is taken. Each year, the balance in the accrued annual leave account is adjusted to reflect changes. To the extent current and prior-year appropriations are not available to fund annual leave earned but not taken, funding will be obtained from future Salaries and Expenses appropriations. Sick leave and other types of nonvested leave are expensed as taken.

M. Employee Benefits

A liability is recorded for estimated and actual future payments to be made for workers' compensation pursuant to the Federal Employees' Compensation Act (FECA). The liability consists of the net present value of estimated future payments calculated by the U.S. Department of Labor (DOL) and the actual unreimbursed cost paid by DOL for compensation paid to recipients under FECA. The actual costs incurred are reflected as a liability because NSF will reimburse DOL two years after the actual payment of expenses. Future NSF Salaries and Expenses Appropriations will be used for DOL's estimated reimbursement.

N. Net Position

Net position is the residual difference between assets and liabilities and is composed of unexpended appropriations and cumulative results of operations. Unexpended appropriations represent the amount of unobligated and unexpended budget authority. Unobligated balances are the amount of appropriations or other authority remaining after deducting the cumulative obligations from the amount available for obligation. The cumulative results of operations figure is the net result of NSF's operations since inception.

O. Retirement Plan

In FY 2004, approximately 28 percent of NSF employees participated in the Civil Service Retirement System (CSRS), to which NSF made matching contributions equal to 7 percent of pay. The majority of NSF employees are covered by the Federal Employees Retirement System (FERS) and Social Security. A primary feature of FERS is that it offers a thrift savings plan to which NSF automatically contributes 1 percent of pay and matches employee contributions up to an additional 4 percent of pay. NSF also contributes the employer's matching share for Social Security for FERS participants.

Although NSF funds a portion of the benefits under FERS and CSRS relating to its employees and withholds the necessary payroll deductions, the agency has no liability for future payments to employees under these plans, nor does NSF report CSRS, FERS, or Social Security assets, or accumulated plan benefits, on its financial statements. Reporting such amounts is the responsibility of the Office of Personnel Management (OPM) and The Federal Retirement Thrift Investment Board. In FY 2004, NSF's contributions to CSRS and FERS were \$2,363,364 and \$7,862,417 respectively. In FY 2003, NSF's contributions to CSRS and FERS were \$2,448,930 and \$7,108,098 respectively.

SFFAS No. 5, Accounting for Liabilities of the Federal Government, requires employing agencies to recognize the cost of pensions and other retirement benefits during their employees' active years of service. OPM actuaries determine pension cost factors by calculating the value of pension benefits expected to be paid in the future, and communicate these factors to the agency for current period expense reporting. Information was also provided by OPM regarding the full cost of health and life insurance benefits.

In FY 2004, NSF, utilizing OPM provided cost factors, recognized \$3,942,925 of pension expenses, \$4,587,960 of post-retirement health benefits expenses, and \$21,285 of post-retirement life insurance expenses, beyond amounts actually paid. NSF recognized offsetting revenue of \$8,552,170 as an imputed financing source to the extent that these intragovernmental expenses will be paid by OPM.

In FY 2003, NSF, utilizing OPM provided cost factors, recognized \$3,835,518 of pension expenses, \$3,845,086 of post-retirement health benefits expenses, and \$19,540 of post-retirement life insurance expenses, beyond amounts actually paid. NSF recognized offsetting revenue of \$7,700,144 as an imputed financing source to the extent that these intragovernmental expenses will be paid by OPM.

P. Commitments, Contingencies, and Possible Future Costs

Commitments

Commitments are contractual agreements involving financial obligations. NSF is committed for goods and services that have been ordered, but have not yet been delivered.

Contingencies - Claims and Lawsuits

NSF is a party to various legal actions and claims brought against it. In the opinion of NSF management and legal counsel, the ultimate resolution of the actions and claims will not materially affect the financial position or operations of the Foundation. NSF recognizes the contingency in the financial statements when claims are expected to result in a material loss, whether from NSF's appropriations or the "Judgment Fund" administered by the Department of Justice under Section 1304 of Title 31 of the United States Code, and, the payment amounts can be reasonably estimated.

Claims and lawsuits have also been made and filed against awardees of the Foundation by third parties. NSF is not a party to these actions and NSF believes there is no possibility that NSF will be legally required to satisfy such claims. Judgments or settlements of the claims against awardees that impose financial obligation on them may be claimed as costs under the applicable contract, grant, or cooperative agreement and thus may affect the allocation of program funds in future fiscal years. In the event that the likelihood of loss on such claims by awardees becomes probable, these amounts can be reasonably estimated and NSF management determines that it will probably pay them, NSF will recognize these potential payments as expenses.

Contingencies – Unasserted Claims

For claims and lawsuits that have not been made and filed against the Foundation, NSF management and legal counsel determine, in their opinion, whether resolution of the actions and claims it is aware of will materially affect the agency's financial position or operations. NSF recognizes a contingency in the financial statements when unasserted claims are probable of assertion, and if asserted would be probable of an unfavorable outcome, and expected to result in a measurable loss, whether from NSF's appropriations or the "Judgment Fund." NSF discloses unasserted claims if materiality or measurability of a potential loss cannot be determined or the loss is more likely than not to occur rather than probable.

Termination Claims

NSF engages organizations in cooperative agreements and contracts to manage, operate and maintain research facilities for the benefit of the scientific community. As part of these agreements and contracts, NSF funds on a pay as you go basis certain employee benefit costs, (accrued vacation and other employee related liabilities, severance pay and medical insurance), long term leases and vessel usage. These agreements permit awardees to make claims for any unpaid costs upon termination or non-renewal of the agreements and contracts.

NSF considers the likelihood of termination or non-renewal to be remote, and has not recorded liabilities for these termination claims on its financial statements. However, one FFRDC operator has identified these payments as obligations of NSF. The termination provision of the cooperative agreement clearly states that NSF's liability for such costs exists only upon termination and is limited to the lesser of available appropriations or \$25 million. NSF, at the discretion of its Director, has offered to use its best efforts to obtain these additional funds, including efforts to obtain such funds from Congress. However, nothing in the agreements or contracts can be construed as implying that Congress will appropriate funds to meet the terms of these claims.

Q. Use of Estimates

The preparation of the accompanying financial statements requires management to make estimates and assumptions about certain estimates included in the financial statements. Actual results will invariably differ from those estimates.

R. Tax Status

Treasury

NSF, as a federal agency, is not subject to federal, state, or local income taxes and, accordingly, no provision for income taxes is recorded.

Note 2. Fund Balance with Treasury

Fund Balance with Treasury consisted of the following components as of September 30, 2004 and 2003:

(Amounts in Thousands)			2004		
	Appropriated Funds	Donated Funds	Special Funds	Other Funds	Total
Obligated Unobligated Available Unobligated Unavailable	\$ 7,204,385 45,802 90,601	9,979 13,276 364	149,944 26,152 2,949	- - -	\$ 7,364,308 85,230 93,914
Total Fund Balance with Treasury	\$ 7,340,788	23,619	179,045	_	\$ 7,543,452
(Amounts in Thousands)			2003		
	Appropriated Funds	Donated Funds	Special Funds	Other Funds	Total
Obligated Unobligated Available Unobligated Unavailable	\$ 6,617,266 100,391 95,122	32,366 18,918 98	133,224 82,912 987	1,591 - 922	\$ 6,784,447 202,221 97,129
Total Fund Balance with					

The Donations Account includes amounts donated to NSF from all sources. Other Funds and amounts in the Donations Account are restricted for intended purposes. Unavailable balances

51,382 217,123

2,513 \$ 7,083,797

6,812,779

\$

include recovered expired appropriations and other amounts related to expired authority and holdings, which are unavailable for NSF use.

In 1999, by law (P.L. 105-277) NSF established a special fund called H-1B Nonimmigrant Petitioner Fees Account. These funds are considered "Special Fund" and are not included in Appropriated Funds. The funds are fees collected for each petition for nonimmigrant status. Under the law, NSF was prescribed a percentage of these fees for specific programs.

"Other Funds" consisted of \$1,591,019 as of September 30, 2003 received from a corporation that registered second level Internet domain names under NSF's cooperative agreement. In FY04, the authority under which these funds were issued was cancelled. The obligations have been removed and any available funds have been returned to Treasury. "Other Funds" also includes deposit accounts, holding accounts and miscellaneous receipt accounts in the amount of \$922,952. These "Other Funds – Unobligated Unavailable" have no budgetary impact and therefore are not part of the unobligated balance per the Statement of Budgetary Resources.

Note 3. Accounts Receivable, Net

Intragovernmental

The Intragovernmental Accounts Receivable consists of reimbursements and repayments due from other government agencies. As of September 30, 2004 and 2003, the amount of intragovernmental accounts receivable was \$23,875,393 and \$18,246,756, respectively. The increase in our Intragovernmental Receivable balance is due to the implementation of OMB's Memorandum M-03-01: *Business Rules for Intragovernmental Transactions*. These rules required NSF to transition to bill agencies on a reimbursable basis after costs have been incurred. Previously, NSF billed most agencies on an advance basis.

<u>Public</u>

In FY 2004, according to the Debt Collection Act of 1982, as amended by the Debt Collection Improvement Act of 1996 (DCIA), and the Office of Management and Budget guidance, NSF wrote off a debt of \$7,928,591, which represents a receivable with a grantee that filed for dissolution.

As of September 30, 2004 and 2003, Accounts Receivable (net) due from private organizations and individuals consisted of:

(Amounts in Thousands)	2004		2003
Accounts Receivable	\$ 97	\$	8,384
Allowance for Uncollectible Accounts	 -	_	(8,182)
Net Amount Due	\$ 97	\$	202

As of September 30, 2004 and 2003, the reconciliation of the allowance for uncollectible accounts is as follows:

(Amounts in Thousands)		2004		2003
Beginning Allowance	\$	8,182	\$	8,182
Additions	Ψ	66	Ψ	-
Reductions (write-offs)		(8,248)		
Ending Allowance	\$	-	\$	8,182

Note 4. Advances

As of September 30, 2004 and 2003, Advances consisted of the following components:

<u>Intragovernmental</u>

(Amounts in Thousands)		2004		2003
	Φ.	20.200	Φ.	10.555
Advances to Others	\$	38,389	\$	18,557
<u>Public</u>				
(Amounts in Thousands)		2004		2003
Advances to Grantees	\$	72,268	\$	66,601
Advances to Contractors		1,155	Ċ	9
Total Advances with the Public	\$	73,423	\$	66,610

Note 5. Property, Plant and Equipment in the Custody of NSF

The components of Property, Plant and Equipment as of September 30, 2004 and 2003 were:

(Amounts in Thousands)	2004					
	Acquisition	Net				
	Cost	Depreciation	Book Value			
Equipment	121,160	\$ 103,219	\$ 17,941			
Aircraft and Satellites	138,487	109,683	28,804			
Buildings and Structures	129,319	44,296	85,023			
Construction in Progress	104,848	-	104,848			
Internal Use Software	6,259	2,432	3,827			
Software in Development						
Total PP&E	500,073	\$ 259,630	\$ 240,443			

(Amounts in Thousands)		2003						
		Acquisition		Accumulated		Net		
	-	Cost		Depreciation		Book Value		
Equipment	\$	67,066	\$	47,179	\$	19,887		
Aircraft and Satellites		138,109		103,321		34,788		
Buildings and Structures		89,537		41,169		48,368		
Construction in Progress		122,700		-		122,700		
Internal Use Software		4,714		1,087		3,627		
Software in Development	_	1,407		_		1,407		
Total PP&E	\$	423,533	\$	192,756	\$	230,777		

Note 6. Property, Plant and Equipment in the Custody of Other Entities

As explained in Note 1-H, Assets Owned by NSF in the Custody of Other Entities, NSF received a ruling from FASAB on accounting for PP&E owned by NSF but in the custody of and used by others. The FASAB guidance requires that PP&E in the custody of others be excluded from NSF PP&E as defined in the Statement of Federal Financial Accounting Standards No. 6 Accounting for Property, Plant and Equipment, and instead based on information contained in the audited financial statements of the organizations holding the assets, disclose the dollar amount of NSF PP&E held by others in the footnotes.

The amount of PP&E owned by NSF but in the custody of other entities identified in the following table was obtained from the respective entities' audited financial statements. If the audited financial statements were not published or released by September 1, or if NSF PP&E is not separately stated on the entities' audited financial statements, then the amounts relating to such entities are annotated as Not Available (N/A) in the table.

The amounts reported by entities in their audited financial statements submitted as of September 1 are as follows:

(Amounts in Thousands)

<u>Federally Funded Research and Development Centers</u> National Center for Atmospheric Research - UCAR National Optical Astronomy Observatories - AURA National Radio Astronomy Observatory - AUI	\$ 2004 N/A N/A N/A	\$ 2003 173,830 400,334 N/A	Year End 9/30 9/30 9/30
Colleges and Universities California Institute of Technology Columbia University Cornell University - Endowed Duke University	\$ 2004 N/A N/A N/A N/A	\$ 2003 N/A N/A N/A N/A	Year End 9/30 9/30 6/30 6/30

Colleges and Universities, continued	2004	2003	Year End
Oregon State University	N/A	N/A	6/30
San Jose State University Foundation	N/A	N/A	6/30
University of Alaska Fairbanks Campus	N/A	N/A	6/30
University of California - San Diego	N/A	N/A	6/30
University of Hawaii	N/A	N/A	6/30
University of Rhode Island	N/A	N/A	6/30
University of Texas at Austin	N/A	N/A	8/31
University of Washington	N/A	N/A	6/30
University of Wisconsin	N/A	N/A	6/30
University of Wisconsin - Madison	N/A	N/A	6/30
Oniversity of Wisconsin - Wadison	14/11	14/11	0/30
Other Entities	2004	2003	Year End
Aerodyne Research Inc	\$ N/A	\$ N/A	9/28
Articular Engineering LLC	N/A	N/A	N/A
Bossa Nova Technologies LLC	N/A	N/A	N/A
Brighton Technologies Group, Inc	N/A	N/A	Not Audited
Ekips Technologies Inc	N/A	N/A	Not Audited
EM Photonics, Inc	N/A	N/A	N/A
Fourth Wave Imaging Corporation	N/A	N/A	Not Audited
Global Contour Ltd	N/A	N/A	N/A
Imago Scientific Instruments Corp	N/A	N/A	9/30
Incorporated Research Institutions for Seismology	N/A	N/A	6/30
Information Systems Laboratories Inc	N/A	N/A	12/31
Joint Oceanographic Institutions Inc	N/A	NA	9/30
Kapetyn-Murnane Laboratories LLC	N/A	N/A	Not Audited
Lucigen Corporation (Formerly Microgen - a WI Corp)	N/A	N/A	Not Audited
Lynntech, Inc	N/A	N/A	Not Audited
Monterey Bay Aquarium Research Institute	N/A	N/A	12/31
Physical Optics Corporation	N/A	N/A	12/31
SINMAT Inc	N/A	N/A	Not Audited
Tetramer Technologies LLC	N/A	N/A	Not Audited
The Venture Group (Venture Innovations, Inc)	N/A	N/A	Not Audited
UNAVCO, Inc	N/A	N/A	12/31
Veco Rocky Mountain, Inc	N/A	N/A	Not Audited
Verionix Engineering Inc	N/A	N/A	N/A
Vista Engineering Inc	N/A	N/A	Not Audited
Woods Hole Oceanographic Institute	N/A	N/A	12/31

Note 7. Other Liabilities

These are current accrued liabilities, which consist of grant and contract accruels, accrued employer contributions for payroll and benefits, disbursements in transit, accrued payroll and benefits, and various employee related liabilities for payroll and benefit deductions. As of September 30, 2004 and 2003, these liabilities consisted of the following:

(Amounts in Thousands)	2004	2003
Intragovernmental		
Employer Contributions for Payroll Benefits and Other	\$ 557	\$ 396
Total Intragovernmental	\$ 557	\$ 396
Accrued Liabilities – Grants, Payroll and Other		
Accrued Liabilities	\$ 306,609	\$ 251,107
Accrued Payroll and Benefits	5,110	3,893
State and Other Income Taxes Withheld	-	915
Employee Deductions for U.S. Savings Bonds	-	8
Total Other Liabilities	\$ 311,719	\$ 255,923

Note 8. Liabilities Not Covered by Budgetary Resources

Certain liabilities are not funded by current budgetary resources. As of September 30, 2004 and 2003, Liabilities Not Covered by Budgetary Resources consisted of the following:

(Amounts in Thousands)		2004		2003
Intragovernmental: FECA Employee Benefits	\$	280	\$	264
Public: FECA Employee Benefits		1,465		1,649
Accrued Annual Leave	_	12,162	_	11,120
Liabilities Not Covered by Budgetary Resources to Fund			_	_
Cost of Operations	\$ _	13,907	\$	13,033
Total Liabilities Not Covered by Budgetary Resources	\$	13,907	\$	13,033

Note 9. FECA Employee Benefits

FECA Employee Benefits consisted of the following components as of September 30, 2004 and 2003:

(Amounts in Thousands)		2004	2003
Intragovernmental: Unreimbursed Actual Costs	\$	280	\$ 264
Public: Estimated Liability	_	1,465	1,649
Total Workers' Compensation Benefits	\$	1,745	\$ 1,913

For FY 2004 and 2003, these amounts represent \$280,398 and \$264,278 respectively, of unreimbursed cost to the DOL for actual compensation paid to recipients under FECA. FECA provides income and medical cost protection to cover federal employees injured on the job or who have a work-related injury or occupational disease, and beneficiaries of employees whose death is attributable to a job related injury or occupational disease. The DOL initially pays valid claims and then bills the employing federal agency.

As of September 30, 2004 and 2003, the estimated liability of \$1,465,000 and \$1,649,000, respectively, are for future worker compensation claims calculated by DOL and include the expected liability for death, disability, medical, and miscellaneous costs for approved compensation cases. The liability is determined using a method that utilizes historical benefit payment patterns related to a specific incurred period and annual benefit payments discounted to present value using OMB's economic assumptions for 10-year Treasury notes and bonds. To account for the effects of inflation on the liability, wage and medical inflation factors are applied to the calculation of future benefits.

Note 10. Statement of Net Cost

Major Program Descriptions

NSF's primary business is to make merit-based grants and cooperative agreements to individual researchers and groups, in partnership with colleges, universities, and other public, private, state, local, and federal institutions, throughout the U.S. By providing these resources, NSF contributes to the health and vitality of the U.S. research and education enterprise, which enables and enhances the Nation's capacity to sustain growth and prosperity. These grants are managed through eight programmatic organizations within NSF that review and evaluate competitive proposals submitted by the science and engineering community for its consideration.

NSF is a single entity for net cost reporting purposes. NSF's programmatic organizations are the Directorates for the Biological Sciences; Computer and Information Science and Engineering; Education and Human Resources; Engineering; Geosciences; Mathematical and Physical Sciences; Social, Behavioral and Economic Sciences; and the Office of Polar Programs.

The Statement of Net Cost was updated in FY 2004 to include investment categories which represents a change in the cost categorization utilized in FY 2003. The Statement of Net Cost is a general overall presentation of NSF-wide expenses incurred by the agency. The presentation of the Statement of Net Cost is aligned with NSF's strategic goals of *People, Ideas, Tools* and *Organizational Excellence*. NSF's new *Organizational Excellence* strategic goal focuses on NSF's administrative and management activities. NSF has assigned ten investment categories that align to *People, Ideas and Tools*. The Investment categories for *People* are Individuals; Institutions; and Collaborations. For Ideas they are Fundamental Science and Engineering; Centers; and Capability Enhancements. For *Tools* they are Large Facilities; Infrastructure and Instrumentation; Polar Tools, Facilities and Logistics; and FFRDCs. These goals are outlined in NSF's FY 2003-2008 Strategic Plan and are integrated into NSF's FY 2005 Budget Request (www.nsf.gov/bfa/bud/fy2005/toc.htm).

In pursuit of its mission, NSF makes investments in *People, Ideas, Tools*. These goals reflect outcomes at the heart of the research enterprise: a diverse, competitive, and globally-engaged U.S. workforce of scientists, engineers, technologists and well-prepared citizens (*People*); the discovery across the frontier of science and engineering, connected to learning, innovation and service to society (*Ideas*); and the broadly accessible, state-of-the-art science and engineering facilities (*Tools*); to get the job done efficiently and effectively. *People* produce the *Ideas* that are the currency of the new knowledge-based economy. The need for more sophisticated *Tools* has paralleled recent advances in science and engineering, creating a growing demand for access to

them. NSF's overall strategy is to invest in state-of-the-art tools that add unique value to research and are accessible and widely shared among researchers across the nation.

Approximately 95 percent of NSF's funds are directly related to the *People, Ideas*, and *Tools* strategic areas of focus. The remaining five percent of NSF's investments are for support of *Organizational Excellence* activities. In FY 2004, *Organizational Excellence* costs amounted to \$268,298,594. All *Organizational Excellence* costs are assigned on a prorated basis to the *People, Ideas* and *Tools* strategic areas.

In FY 2003 and 2004, organizational excellence activities include Salary & Expenses, NSB and Office of Inspector General (OIG) expenses which provide for salaries and benefits of persons employed at the NSF; general operating expenses, including key activities to advance the NSF information systems technology and to enhance staff training, audit and OIG activities, and OPM and DOL benefits costs paid on behalf of NSF. These indirect costs are allocated to NSF programs based on each program's direct costs.

In accordance with OMB Bulletin 01-09, Form and Content of Agency Financial Statements, costs incurred for services provided by other federal entities are reported in the full costs of NSF programs and are identified as "intragovernmental." All earned revenues are funding sources provided through reimbursable agreements with other federal entities and are retained by NSF. Earned revenues are recognized when the related program or administrative expenses are incurred and are deducted from the full cost of the programs to arrive at the net cost of operating NSF's programs. In FY 2004, the Statement of Net Cost does not report intragovernmental costs separately. The intragovernmental costs are as follows:

Intragovernmental Costs and Earned Revenue by Investment Category

(Amounts in Thousands)			2004	
		<u>Federal</u>	<u>Public</u>	<u>Total</u>
People	_			
Individuals	\$	3,368	647,682	
Institutions		62	202,025	
Collaborations	_	2,233	426,027	
Total People Program Cost				1,281,397
Less: Earned Revenue			_	20,289
Net People			_	1,261,108
Ideas	_			
Fundamental Science & Engineering		25,312	2,096,153	
Centers		2,400	295,169	
Capability Enhancements	_	1,596	219,531	
Total Ideas Program Cost				2,640,161
Less: Earned Revenue			_	62,110
Net Ideas			_	2,578,051

Intragovernmental Costs and Earned Revenue by Investment Category, continued

		<u>Federal</u>	<u>Public</u>	<u>Total</u>
Tools	_			
Large Facilities	\$	5,260	530,903	
Infrastructure and Implementation		15,688	264,854	
Polar Tools, Facilities and Logistics		70,276	174,956	
Federally Funded Research & Development Centers		4,275	208,113	
Total Tools Program Cost	_		_	1,274,325
Less Earned Revenue			_	13,341
Net Tools				1,260,984
			_	
Total Net Costs	\$	130,471	5,065,413	5,100,143

Gross Cost and Earned Revenue by Budget Functional Classification

Total Gross Cost and Earned Revenue by Budget Functional Classification for FY 2004 and 2003 were as follows:

Budget Functional Classification

NSF - General Science, Space and

Technology (Code 250)

(Amounts in Thousands)	2004	2003
Gross Cost	\$ 5,195,883	\$ 4,801,163
Earned Revenue	95,740	93,392
Net Cost	\$ 5,100,143	\$ 4,707,771

Intragovernmental Gross Cost and Earned Revenue by Budget Functional Classification

Intragovernmental Gross Cost and Earned Revenue by Budget Functional Classification for FY 2004 and 2003 were as follows:

Budget Functional Classification

NSF - General Science, Space and

Technology (Code 250)

(Amounts in Thousands)	2004	2003
Gross Cost	\$ 130,471	\$ 157,356
Earned Revenue	95,740	93,392
Net Cost	\$ 34,731	\$ 63,964

Note 11. Budgetary Resources

Budget Authority includes \$23,937,915 and \$42,161,490 of donations and interest as of September 30, 2004 and 2003, respectively. Budget Authority was increased for non-expenditure transfers from the U.S. Agency for International Development of \$11,250,000 in 2004, and \$13,143,175 in 2003. Budget Authority as of September 30, 2004 and 2003 was also adjusted for Congressional initiated rescissions contained in P.L. 108-199 totaling \$33,104,605 and P.L. 108-7 totaling \$34,740,498, respectively.

NSF maintains permanent indefinite appropriations for Research and Related Activities - 49x0100 and Major Research Equipment - 49x0551. NSF also maintains permanent indefinite accounts for Donations - 49x8960 and H-1B Nonimmigrant Petitioner fees - 49x5176.

The status of Budgetary Resources as of September 30, 2004, consisted of Budgetary Resources obligated of \$5,870,718,720 available authority of \$85,230,105 and unavailable authority of \$93,913,641. The status of Budgetary Resources as of September 30, 2003, included Budgetary Resources obligated of \$5,578,644,000, available authority of \$202,220,949 and unavailable authority of \$96,207,143.

In FY 2004, per OMB guidance dated March 23, NSF excluded reporting Indian Rupees in any Budgetary Accounts. As a result, the difference between FY 2004 beginning of period unobligated balance and FY 2003 end of period unobligated balance is \$59,745. Similarly, the difference between FY 2004 net obligated balance beginning of period and FY 2003 end of period net obligated balance is \$237,348.

Note 12. Commitments and Contingencies

Claims

NSF has been informed of potential contractor claims for additional compensation under a contract awarded by the United States Air Force for the reconfiguration of three NSF-owned LC130 aircraft. NSF worked with the Air Force to determine the validity of the potential contractor's claims. It is NSF's opinion that payment of the additional compensation is probable. The amount of additional compensation has been estimated at approximately \$3,000,000.

Environmental and Clean up Costs

The Toolik Field Station is operated by the Institute of Arctic Biology at the University of Alaska, Fairbanks. As the primary customer for the Institute, NSF projects a remaining balance of \$121,972 in remediation costs for the Toolik Field Station oil spill that occurred on August 25, 2001.

NSF manages the U.S. Antarctic Program. The Antarctic Conservation Act and its implementing regulations identify the requirements for environmental clean-up in Antarctica. NSF continually monitors the U.S. Antarctic Program in regards to environmental issues.

NSF is continuing its efforts to conduct limited clean-up of a former research station at Cape Hallet, in cooperation with the New Zealand Antarctic Program. The station was jointly operated by the U.S. and New Zealand from 1957 to 1973. In the past year, progress has been made in determining the scope of the effort that will need to be undertaken to assess clean-up activities. Approximately \$80,000 will be provided to conduct an assessment of the fuel storage tank. Remediation efforts are expected to continue during the 2004-2005 summer season operations. At present, the full extent of clean-up efforts and the associated costs are unknown.

NSF is continuing its actions to excess the National Scientific Balloon Facility (NSBF) land through the General Services Administration to the National Aeronautics and Space Administration (NASA) by completing a no-cost transfer. NASA engineers have reported 10 wells on the NSBF site and are aware of one contaminated well from battery disposal. NSF estimates clean-up costs at \$50,000.

Note 13. Statement of Financing Disclosures

Explanation of the Relationship Between Liabilities Not Covered by Budgetary Resources on the Balance Sheet and the Change in Components Requiring or Generating Resources in Future Periods.

Liabilities Not Covered by Budgetary Resources of \$13,907,308 and \$13,032,863 for FY 2004 and 2003, respectively, represent NSF's FECA liability to DOL and employees, leave earned but not taken, and lease liabilities. The amount reported on the Statement of Financing as Total Components of Net Cost of Operations that will Require or Generate Resources in Future Periods of \$1,058,445 for FY 2004 and \$515,543 for FY 2003, represents the change in NSF's expenses for unfunded liabilities for FECA, leave earned but not taken, and lease liabilities.

Note 14. Restatement

NSF's FY 2003 Statement of Changes in Net Position has been restated to correct the reporting of H-1B Nonimmigrant Petitioner Fees (fees) that were considered appropriations in prior years. Accordingly, the activities of these fees were presented in prior years as part of *Unexpended Appropriations* rather than *Cumulative Results of Operations* as required by the U.S. Department of Treasury's guidance on *Unavailable Special Fund Receipt Account Transfers*. As a result, beginning balances related to *Unexpended Appropriations* and *Cumulative Results of Operations* for FY 2003 were overstated and understated by \$186,249,525 respectively, representing the balance of the unexpended fees from prior years. FY 2003 activities relating to fees received of \$65,343,110 were reclassified from *Appropriations Received* to *Earmarked Receipts*, and expenditures of \$35,806,159 were reclassified from *Appropriations Used – Unexpended Appropriations*, to *Appropriations Used – Cumulative Results of Operations*. The effect of the restatement on the FY 2003 Statement of Changes in Net Position is summarized below:

(Amounts	in	Thousands)
----------	----	------------

Cumulative Results of Operations	-	2003 Reported	Effect of Restatement	2003 Restated
Beginning Balances	\$	258,027	186,250	\$ 444,277
Budgetary Financing Sources Appropriated Earmarked Receipts Transferred In		_	65,343	65,343
Appropriations Used		4,673,452	(35,806)	4,637,646
Ending Balances	\$	273,624	215,787	\$ 489,411
(Amounts in Thousands)				
		2003	Effect of	2003

Unexpended Appropriations Reported Restatement Restated **Beginning Balances** 6,089,118 (186,250) \$ 5,902,868 **Budgetary Financing Sources** Appropriations Received 5,410,035 (65,343)5,344,692 Appropriations Used (4,673,452)35,806 (4,637,646)**Ending Balances** 6,771,590 (215,787)6,555,803

The FY 2003 amounts for *Unexpended Appropriations* and *Cumulative Results of Operations* shown above as \$6,555,803,794 and \$489,410,698 have also been restated on the Balance Sheet.

Required Supplementary Information

Budgetary Resources by Major Budgetary Accounts

In the following table, NSF budgetary information for the fiscal years ended September 30, 2004 and 2003, as presented in the Statement of Budgetary Resources, is disaggregated for each of NSF's major budgetary accounts.

Combining Statement of Budgetary Resources

		2004 (Amounts in Thousands)						
		Research	Major OIG,					
		and		Research	S&E, and	Special and		
		Related	Education	Equipment	NSB	Donated		<u>Total</u>
Budgetary Resources								
Budget Authority:								
Appropriations Received	\$	4,276,600	944,550	155,900	233,900	24,507	\$	5,635,457
Net Transfers		10,989	-	-	261	-		11,250
Unobligated Balances - Beginning of Period		82,985	41,979	66,108	4,381	102,915		298,368
Spending Authority from Offsetting Collections: Earned:								
Collected		74,296	10,996	-	4,955	-		90,247
Receivable from Federal Sources		4,607	1,305	-	(283)	-		5,629
Change in Unfilled Customer Orders:								
Advance Received		(10,647)	(7,875)	-	-	-		(18,522)
Without Advance from Federal Sources	-	33,911	66	-	(2)	-		33,975
Spending Authority Subtotal	-	102,167	4,492	-	4,670	-		111,329
Recoveries of Prior Year Obligations		38,864	17,285	-	2,736	2,283		61,168
Permanently Not Available		(43,707)	(20,357)	(920)	(2,725)	-		(67,709)
Total Budgetary Resources	\$	4,467,898	987,949	221,088	243,223	129,705	\$	6,049,863
Status of Budgetary Resources								
Obligations Incurred:								
Direct	\$	4,306,488	950,679	183,964	231,058	86,965	\$	5,759,154
Reimbursable		102,462	4,502	_	4,601	-		111,565
Total Obligations Incurred		4,408,950	955,181	183,964	235,659	86,965		5,870,719
Unobligated Balances:								
Apportioned		4,351	1,406	37,124	2,921	39,428		85,230
Unobligated Balances Not Available		54,597	31,362	-	4,643	3,312		93,914
Total Status of Budgetary Resources	\$	4,467,898	987,949	221,088	243,223	129,705	\$	6,049,863
Relationship of Obligations to Outlays								
Net Obligated Balance - Beginning of Period	\$	4,855,623	1,528,165	198,482	36,349	165,590	\$	6,784,209
Net Obligated Balance - End of Period								
Accounts Receivable		(21,741)	(1,925)	-	(209)	-		(23,875)
Unfilled Customer Orders from Federal Sources		(106,805)	(3,426)	-	(5)	-		(110,236)
Undelivered Orders		5,171,697	1,568,165	209,444	34,621	164,750		7,148,677
Accounts Payable		274,560	55,225	10,260	14,524	(4,827)		349,742
Total Net Obligated Balance - End of Period	\$	5,317,711	1,618,039	219,704	48,931	159,923	\$	7,364,308
Outlays								
Disbursements	\$	3,869,480	846,651	162,743	220,624	90,349	\$	5,189,847
Collections	-	(63,649)	(3,121)	<u>-</u>	(4,955)			(71,725)
Subtotal		3,805,831	843,530	162,743	215,669	90,349		5,118,122
Less: Offsetting Receipts		-	-	-	-	23,938		23,938
Net Outlays	\$	3,805,831	843,530	162,743	215,669	66,411	\$	5,094,184

Combining Statement of Budgetary Resources

			2003 (Amounts in Thousands)					
		Research	Major OIG,					
		And		Research	S&E, and	Special and		
		Related	Education	Equipment	<u>NSB</u>	Donated		Total
Budgetary Resources								
Budget Authority:								
Appropriations Received	\$	4,083,000	909,080	149,510	203,102	107,505	\$	5,452,197
Net Transfers		12,828	-	-	315	-		13,143
Unobligated Balances - Beginning of Period		56,677	64,032	96,551	2,773	84,784		304,817
Spending Authority from Offsetting Collections:								
Earned:								
Collected		62,487	8,261	-	4,819	1		75,568
Receivable from Federal Sources		17,067	621	-	374	-		18,062
Change in Unfilled Customer Orders:		(50.071)	(7.704)		(2)			(50.500)
Advance Received Without Advance from Federal Sources		(50,871)	(7,724)	-	(3)	-		(58,598)
		70,396	3,359		5,190	1		73,755
Spending Authority Subtotal		99,079	4,517	48		1,100		108,787
Recoveries of Prior Year Obligations Permanently Not Available		38,858 (45,794)	23,431 (18,012)	(972)	1,962 (2,493)	1,100		65,399 (67,271)
rermanentry Not Avanable		(43,734)	(10,012)	(972)	(2,493)	-		(07,271)
Total Budgetary Resources	\$	4,244,648	983,048	245,137	210,849	193,390	\$	5,877,072
Status of Budgetary Resources								
Obligations Incurred:								
Direct	\$	4,062,220	936,560	179,029	201,440	90,475	\$	5,469,724
Reimbursable		99,384	4,508	-	5,028	-		108,920
Total Obligations Incurred		4,161,604	941,068	179,029	206,468	90,475		5,578,644
Unobligated Balances:								
Apportioned		28,075	5,002	66,060	1,254	101,830		202,221
Unobligated Balances Not Available		54,969	36,978	48	3,127	1,085		96,207
Total Status of Budgetary Resources	\$	4,244,648	983,048	245,137	210,849	193,390	\$	5,877,072
Relationship of Obligations to Outlays								
Net Obligated Balance - Beginning of Period	\$	4,441,353	1,376,305	137,418	25,402	134,145	\$	6,114,623
Net Obligated Balance - End of Period	Ψ	., ,	1,0 / 0,0 00	107,.10	20,.02	10 .,1 .0	Ψ	0,11.,020
Accounts Receivable		(17,134)	(621)	-	(492)	-		(18,247)
Unfilled Customer Orders from Federal Sources		(72,895)	(3,359)	_	(7)	_		(76,261)
Undelivered Orders		4,699,456	1,484,685	191,010	20,083	166,633		6,561,867
Accounts Payable		246,434	47,460	7,472	16,765	(1,043)		317,088
Total Net Obligated Balance - End of Period	\$	4,855,861	1,528,165	198,482	36,349	165,590	\$	6,784,447
Outlays								
Disbursements	\$	3,620,775	761,798	117,916	193,186	57,929	\$	4,751,604
Collections	Ψ	(11,616)	(537)	-	(4,816)	(1)	Ψ	(16,970)
Subtotal		3,609,159	761,261	117,916	188,370	57,928		4,734,634
Less: Offsetting Receipts		-,,,	-			42,162		42,162
Net Outlays	\$	3,609,159	761,261	117,916	188,370	15,766	\$	4,692,472
- ··· ·· / ··		, ,,	,	. ,	7	- ,		

National Science Foundation Required Supplementary Information As of and for the Years Ended September 30, 2004 and 2003

Required Supplementary Information

Intragovernmental Balances and Deferred Maintenance

Intragovernmental Assets by Partner Agency (Unaudited)

Intragovernmental assets on this schedule support the intragovernmental asset line items on NSF's Balance Sheets as of September 30, 2004 and 2003. Intragovernmental balances included in Fund Balance with Treasury as of September 30, 2004 and 2003, consisted of the following:

(Amounts in Thousands)	2004	2003
Department of State	\$ -	\$ 297
Department of the Treasury	7,543,452	7,083,500
Total	\$ 7,543,452	\$ 7,083,797

In FY 2004, NSF foreign currency assets consisted of the following:

(Amounts in Thousands)	2004	2003
Department of State	\$ 302 \$	

Intragovernmental Accounts Receivable balances as of September 30, 2004 and 2003, consisted of the following:

(Amounts in Thousands)	2004	2003
Central Intelligence Agency	\$ 5,306	\$ 3,374
Department of Agriculture	84	66
Department of Air Force	958	547
Department of Army	418	819
Department of Commerce	1,443	886
Department of Defense	4,191	2,486
Department of Education	433	166
Department of Energy	1,313	1,276
Department of Health and Human Services	4,175	4,796
Department of Homeland Security	820	118
Department of Housing and Urban Development	205	135
Department of Justice	23	7
Department of Labor	121	44
Department of Navy	520	303
Department of State	176	70
Department of the Interior	64	58
Department of Transportation	244	108
Department of Treasury	8	4
Environmental Protection Agency	98	120
General Services Administration	1	4
Library of Congress	71	-
National Aeronautics and Space Administration	2,325	2,723
National Archives and Records Administration	245	_
National Foundation on the Arts and Humanities	8	12
Office of the President	-	4
Small Business Administration	2	-
Smithsonian Institute	1	2
Social Security Administration	50	12
U.S. Army Corp of Engineers	 572	 107
Total	\$ 23,875	\$ 18,247

Intragovernmental Advances balances as of September 30, 2004 and 2003 consisted of the following:

(Amounts in Thousands)	2004	2003
Department of the Air Force	\$ 9,202	\$ -
Department of Commerce	300	-
Department of the Navy	28,887	18,557
Total	\$ 38,389	\$ 18,557

Intragovernmental Liabilities by Partner Agency (Unaudited)

(Amounts in Thousands)

(Timounts in Thousands)	2004					2003					
Agency	Advances From Others		Other Liabilities		Employee Benefits		Advances From Others		Other Liabilities	Employee Benefits	
Central Intelligence Agency	\$ 406	\$	-	\$	-	\$	1,833	\$	- \$	-	
Department of Agriculture	86		-		-		194		-	-	
Department of Air Force	1,514		3,000		-		2,264		-	-	
Department of Army	26		-		-		259		-	-	
Department of Commerce	713		-		-		1,647		-	-	
Department of Education	15,642		-		-		19,107		-	-	
Department of Energy	495		-		-		2,205		-	-	
Department of Health and Human Services	875		-		-		5,218		-	-	
Department of Housing and Urban Development	718		-		-		973		-	-	
Department of the Interior	-		-		-		28		-	-	
Department of Justice	36		-		-		112		-	-	
Department of Labor	148		-		280		237		-	264	
Department of Navy	204		-		-		702		-	-	
Department of State	204		-		-		441		-	-	
Department of Transportation	413		-		-		606		-	-	
Department of Treasury	11		-		-		111		-	-	
Environmental Protection Agency	-		_		-		59		-	-	
General Services Administration	1		-		-		73		-	-	
National Aeronautics and Space Administration	924		-		-		3,032		-	-	
National Foundation on the Arts and Humanities	-		-		-		2		-	-	
Office of Personnel Management	-		557		-		-		396	-	
Office of the President	2		-		-		6		-	-	
Office of the Secretary - Defense Agencies	920		-		-		2,604		-	-	
Smithsonian Institute	-		-		-		8		-	-	
Social Security Administration	22		-		-		19		-	-	
U.S. Army Corp of Engineers	51	_					193	_	<u>-</u>		
Total	\$ 23,411	\$	3,557	\$	280	\$	41,933	\$	396 \$	264	

Deferred Maintenance (Unaudited)

NSF performs condition assessment surveys in accordance with FASAB standards for capitalized property, plant and equipment to determine if any maintenance is needed to keep an asset in an acceptable condition or restore an asset to a specific level of performance. NSF considers deferred maintenance to be any maintenance that is not performed on schedule, unless it is determined from the condition of the asset that scheduled maintenance does not have to be performed. Deferred maintenance also includes any other type of maintenance that, if not performed, would render the PP&E non-operational. Circumstances such as non-availability of parts or funding are considered reasons for deferring maintenance.

NSF considered whether any scheduled maintenance necessary to keep fixed assets of the agency in an acceptable condition was deferred at the end of fiscal years 2004 and 2003. Assets deemed to be in excellent or good condition are considered to be in acceptable condition. Assets in fair or poor condition are in unacceptable condition and the deferred maintenance required to get them to an acceptable condition are reported. NSF determines the condition of an asset in accordance with standards comparable to those used in the private industry. Due to the environment and remote location of Antarctica, all deferred maintenance on assets in fair or poor condition is considered critical in order to maintain operational status.

During FY 2003, NSF determined that scheduled maintenance on 194 items of Antarctic equipment was not completed and was deferred or delayed for a future period. The largest dollar amount of deferred maintenance for any single item approximated \$16,000. The items included light and heavy mobile equipment requiring \$134,083 of maintenance and a few power distribution and shop equipment items requiring \$3,167. There are 176 items rated to be in fair condition and 18 rated to be in poor condition. All of the equipment is considered critical to NSF operations and estimated to require \$137,250 in total maintenance.

In FY 2004, NSF determined that scheduled maintenance on 173 items of Antarctic equipment was not completed and was deferred or delayed for a future period. The largest dollar amount of deferred maintenance for any single item approximated \$15,383. The items included light and heavy mobile equipment with a few items of power distribution and shop equipment. 167 items were rated to be in fair condition and 6 were rated to be in poor condition. All of the equipment is considered critical to NSF operations and estimated to require \$127,646 in maintenance.

National Science Foundation Required Supplementary Stewardship Information As of and for the Years Ended September 30, 2004 and 2003

Required Supplementary Stewardship Information

Stewardship Investments

Stewardship Investments Research and Human Capital

(Amounts in Thousands) (Unaudited)

		<u>2004</u>		<u>2003</u>		<u>2002</u>		<u>2001</u>		<u>2000</u>		
Research and Human Capital Activities												
Basic Research Applied Research Education and Training Non-Investing Activities	\$	3,494,302 209,225 1,224,058 268,298	\$	3,519,159 218,152 867,489 196,363	\$	3,092,060 193,788 767,734 183,887	\$	2,692,243 211,421 704,949 170,757	\$	2,636,518 173,670 596,517 162,021		
Total Research & Human Capital Activities	\$	5,195,883	\$	4,801,163	\$	4,237,469	\$	3,779,370	\$	3,568,726		
Inputs, Outputs and/or Outcomes												
Research and Human Capital Activities												
<u>Investments In:</u>												
Universities Industry Federal Agencies Small Business FFRDC	\$	3,705,751 196,260 107,212 200,995 985,665 5,195,883	\$	3,310,365 178,000 144,792 186,400 981,606 4,801,163	\$	2,919,897 185,062 106,458 144,844 881,208 4,237,469	\$	2,631,405 162,176 125,823 130,977 728,989 3,779,370	\$	2,470,300 160,573 132,790 119,345 685,718 3,568,726		
Support To:												
Scientists Postdoctoral Programs Graduate Students	\$ \$	477,970 175,680 546,084 1,199,734	\$ \$	427,304 163,239 475,315 1,065,858	\$ \$	394,144 148,334 402,620 945,098	\$ \$	355,261 128,499 362,820 846,580	\$	359,228 117,504 315,583 792,315		
Outputs & Outcomes:												
Number Of:												
Awards Actions		23,000		23,000		21,000		20,000		20,000		
Senior Researchers		31,000		30,000		28,000		27,000		24,000		
Other Professionals Postdoctoral Associates		15,000 6,000		12,000 6,000		11,000 6,000		10,000 6,000		8,000 5,000		
Graduate Students		29,000		27,000		26,000		25,000		22,000		
Undergraduate Students		35,000		32,000		32,000		31,000		30,000		
K-12 Students		14,000		14,000		11,000		11,000		12,000		
K-12 Teachers		86,000		85,000		84,000		83,000		83,000		

NSF's mission is to support basic scientific research and research fundamental to the engineering process as well as science and engineering education programs. To this end, NSF invests in the three strategic areas: *People, Ideas*, and *Tools*. Investment activities focused on *People* facilitate the creation of a diverse, internationally competitive and globally engaged workforce of scientists, engineers and well-prepared citizens. NSF supports activities to improve formal and informal science, mathematics, engineering and technology education at all levels, as well as

public science literacy projects that engage people of all ages in life-long learning. Investment activities focused on *Ideas* support cutting edge research and education that yield new and important discoveries and promote the development of new knowledge and techniques within and across traditional disciplinary boundaries. Investment in *Tools* provides state-of-the-art instrumentation, equipment, computation and computing infrastructure and multi-user facilities such as digital libraries, research vessels and aircraft, for all fields of science, engineering and education. The *Organizational Excellence* strategic goal focuses on the administration and management activities that support the other three goals.

NATIONAL SCIENCE FOUNDATION 4201 Wilson Boulevard ARLINGTON, VIRGINIA 22230



November 12, 2004

To: Dr. Warren M. Washington

Chairman, National Science Board

Dr. Arden L. Bement

Acting Director, National Science Foundation

Deborah Curitm for

From: Dr. Christine C. Boesz

Inspector General

Subject: Audit of the National Science Foundation's

Fiscal Years 2004 and 2003 Financial Statements

This memorandum transmits KPMG LLP's financial statement audit report of the National Science Foundation (NSF) for its Fiscal Year 2004, which includes Fiscal Year 2003 comparative information.

Results of Independent Audit

The Chief Financial Officer's (CFO) Act of 1990 (P.L. 101-576), as amended, requires NSF's Inspector General or an independent external auditor, as determined by the Inspector General, to audit the Foundation's financial statements. Under a contract monitored by the Office of Inspector General (OIG), KPMG, an independent public accounting firm, performed an audit of NSF's Fiscal Years 2004 and 2003 financial statements. The contract required that the audit be performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States, and Bulletin 01-02, *Audit Requirements for Federal Financial Statements*, issued by the United States Office of Management and Budget.

KPMG issued an unqualified opinion on NSF's financial statements. In its Report on Internal Controls Over Financial Reporting, KPMG identified two reportable conditions relating to NSF's post-award administration and contract monitoring. KPMG also reported that there were no instances in which NSF's financial management systems did not substantially comply with the requirements of the Federal Financial Management Improvement Act of 1996 (FFMIA), and found no reportable noncompliance with laws and regulations it tested.

Management's response dated November 10, 2004, follows KPMG's report.

Evaluation of KPMG's Audit Performance

To fulfill our responsibilities under the CFO Act of 1990, as amended, and other related financial management legislation, the Office of Inspector General:

- Reviewed KPMG's approach and planning of the audit;
- Evaluated the qualifications and independence of the auditors;
- Monitored the progress of the audit at key points;
- Coordinated periodic meetings with NSF management to discuss audit progress, findings and recommendations;
- Reviewed KPMG's audit report to ensure compliance with Government Auditing Standards and Office of Management and Budget Bulletin No. 01-02; and
- Coordinated issuance of the audit report.

KPMG LLP is responsible for the attached auditor's report dated November 4, 2004, and the conclusions expressed in the report. We do not express any opinion on NSF's financial statements, internal control, conclusions on compliance with laws and regulations, or on whether NSF's financial management systems substantially complied with FFMIA.

The Office of Inspector General appreciates the courtesies and cooperation extended to KPMG LLP and OIG staff by NSF during the audit. If you or your staff have any questions, please contact me or Deborah H. Cureton, Associate Inspector General for Audit.

Attachment

cc: Dr. Mark S. Wrighton, Chair, Audit and Oversight Committee



KPMG LLP 2001 M Street, NW Washington, DC 20036

Independent Auditors' Report

Dr. Warren M. Washington Chairman, National Science Board

Dr. Arden Bement Acting Director, National Science Foundation

We have audited the accompanying balance sheets of the National Science Foundation (NSF) as of September 30, 2004 and 2003, and the related statements of net cost, changes in net position, budgetary resources, and financing (hereinafter referred to as the financial statements) for the years then ended. The objective of our audits was to express an opinion on the fair presentation of these financial statements. In connection with our audits, we also considered NSF's internal control over financial reporting and tested the NSF's compliance with certain provisions of applicable laws, regulations, contracts and grant agreements that could have a direct and material effect on its financial statements.

Summary

As stated in our opinion on the financial statements, we concluded that NSF's financial statements as of and for the years ended September 30, 2004 and 2003 are presented fairly, in all material respects, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 14 to the financial statements, NSF restated its fiscal year 2003 unexpended appropriations and cumulative results balances reported on the Balance Sheet and Statement of Changes in Net Position.

Our consideration of internal control over financial reporting resulted in the following conditions being identified as reportable conditions:

- Post-award Administration Post-award administration, especially with respect to financial
 monitoring, has been a long-standing problem and NSF has not made sufficient progress to
 effectively address the findings identified to date.
- Contract Monitoring NSF does not adequately review the public vouchers submitted by contractors receiving advanced payments. Without adequately performing such procedures, misstatements in expenditures may remain undetected.

However, the reportable conditions identified above are not considered to be material weaknesses.

The results of our tests of compliance with certain provisions of laws, regulations, contracts, and grant agreements disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*, issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*.



NSF management does not concur with the findings regarding the reportable conditions. Management's response dated November 10, 2004 follows this report.

The following sections discuss our opinion on the NSF's financial statements, our consideration of the NSF's internal control over financial reporting, our tests of the NSF's compliance with certain provisions of applicable laws, regulations, contracts, and grant agreements, and management's and our responsibilities.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of the National Science Foundation as of September 30, 2004 and 2003, and the related statements of net cost, changes in net position, budgetary resources, and financing, for the years then ended.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of NSF as of September 30, 2004 and 2003, and its net costs, changes in net position, budgetary resources, and reconciliation of net costs to budgetary obligations for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 14 to the financial statements, the NSF restated its fiscal year 2003 unexpended appropriations and cumulative results balances reported on the Balance Sheet and Statement of Changes in Net Position.

The information in the Management Discussion and Analysis, Required Supplementary Stewardship Information, and Required Supplementary Information sections is not a required part of the financial statements, but is supplementary information required by accounting principles generally accepted in the United States of America or OMB Bulletin No. 01-09, Form and Content of Agency Financial Statements. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of this information. However, we did not audit this information and, accordingly, we express no opinion on it. Based upon our limited procedures, we determined that NSF could not complete the intragovernmental balance reconciliations with its governmental trading partners, as required by OMB Bulletin 01-09, because, although NSF issued confirmations to its major partners, such partners did not respond with adequate information to assist in reconciling such balances.

Our audits were conducted for the purpose of forming an opinion on the financial statements taken as a whole. The Detailed Performance Information (Section II) is an integral part of NSF's *Fiscal Year 2004 Performance and Accountability Report*. However, this information is not a required part of the financial statements and is presented for additional analysis. Accordingly, it has not been subjected to auditing procedures and therefore we express no opinion on it.

Internal Control Over Financial Reporting

Our consideration of internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be reportable conditions. Under standards issued by the American Institute of Certified Public Accountants, reportable conditions are matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgment, could adversely affect NSF's ability to record, process, summarize, and report financial data consistent with the assertions by management in the financial statements.



Material weaknesses are reportable conditions in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements, in amounts that would be material in relation to the financial statements being audited, may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions.

In our fiscal year 2004 audit, we noted certain matters, described in Exhibit I involving internal control over financial reporting and its operation that we consider to be reportable conditions. However, the reportable conditions identified are not considered to be material weaknesses.

* * * * *

A summary of the status of the prior year reportable condition is included as Exhibit II.

We also noted other matters involving internal control over financial reporting and its operation that we have reported to the management of NSF in a separate letter dated November 4, 2004.

Compliance and Other Matters

Our tests of compliance with certain provisions of laws, regulations, contracts, and grant agreements, as described in the Responsibilities section of this report, exclusive of those referred to in the *Federal Financial Management Improvement Act* (FFMIA), disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and OMB Bulletin No. 01-02.

The results of our tests of FFMIA disclosed no instances in which NSF's financial management systems did not substantially comply with Federal financial management system requirements, applicable Federal accounting standards, or the United States Government Standard General Ledger at the transaction level.

We noted other matters involving compliance with laws and regulations that, under *Government Auditing Standards* and OMB Bulletin 01-02, were not required to be included in this report, that we have reported to the management of NSF in a separate letter dated November 4, 2004.

Responsibilities

Management's Responsibilities. The *Government Management Reform Act of 1994* (GMRA) requires each Chief Financial Officer (CFO) Act agency to report annually to Congress on its financial status and any other information needed to fairly present its financial position and results of operations. To meet the GMRA reporting requirements, NSF prepares annual financial statements.

Management is responsible for the financial statements, including:

- Preparing the financial statements in conformity with accounting principles generally accepted in the United States of America;
- Establishing and maintaining internal controls over financial reporting, and preparing the Management Discussion and Analysis (including the performance measures), Required Supplementary Information, and Required Supplementary Stewardship Information, and
- Complying with laws, regulations, contracts, and grant agreements, including FFMIA.

In fulfilling this responsibility, estimates and judgments by management are required to assess the expected benefits and related costs of internal control policies. Because of inherent limitations in internal control, misstatements, due to error or fraud may nevertheless occur and not be detected.



Auditors' Responsibilities. Our responsibility is to express an opinion on the fiscal year 2004 and 2003 financial statements of NSF based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, and OMB Bulletin No. 01-02. Those standards and OMB Bulletin No. 01-02 require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit includes:

- Examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements;
- Assessing the accounting principles used and significant estimates made by management; and
- Evaluating the overall financial statement presentation.

We believe that our audits provide a reasonable basis for our opinion.

In planning and performing our fiscal year 2004 audit, we considered NSF's internal control over financial reporting by obtaining an understanding of NSF's internal control, determining whether internal controls had been placed in operation, assessing control risk, and performing tests of controls in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements. We limited our internal control testing to those controls necessary to achieve the objectives described in *Government Auditing Standards* and OMB Bulletin No. 01-02. We did not test all internal controls relevant to operating objectives as broadly defined by the *Federal Managers' Financial Integrity Act of 1982*. The objective of our audit was not to provide assurance on internal control over financial reporting. Consequently, we do not provide an opinion thereon.

As required by OMB Bulletin No. 01-02, we considered NSF's internal control over Required Supplementary Stewardship Information by obtaining an understanding of NSF's internal control, determining whether these internal controls had been placed in operation, assessing control risk, and performing tests of controls. Our procedures were not designed to provide assurance on internal control over Required Supplementary Stewardship Information and, accordingly, we do not provide an opinion thereon.

As further required by OMB Bulletin No. 01-02 with respect to internal control related to performance measures determined by management to be key and reported in the Management Discussion and Analysis section, we obtained an understanding of the design of significant internal controls relating to the existence and completeness assertions and determined whether they had been placed in operation. Our procedures were not designed to provide assurance on internal control over performance measures and, accordingly, we do not provide an opinion thereon.

As part of obtaining reasonable assurance about whether NSF's fiscal year 2004 financial statements are free of material misstatement, we performed tests of NSF's compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts, and certain provisions of other laws and regulations specified in OMB Bulletin No. 01-02, including certain provisions referred to in FFMIA. We limited our tests of compliance to the provisions described in the preceding sentence, and we did not test compliance with all laws, regulations, contracts, and grant agreements applicable to NSF. Providing an opinion on compliance with laws, regulations, contracts, and grant agreements was not an objective of our audit and, accordingly, we do not express such an opinion.



Under OMB Bulletin No. 01-02 and FFMIA, we are required to report whether NSF's financial management systems substantially comply with (1) Federal financial management systems requirements, (2) applicable Federal accounting standards, and (3) the United States Government Standard General Ledger at the transaction level. To meet this requirement, we performed tests of compliance with FFMIA Section 803(a) requirements.

Distribution

This report is intended for the information and use of NSF's management, NSF's Office of the Inspector General, OMB, the Government Accountability Office, and the U.S. Congress, and is not intended to be and should not be used by anyone other than these specified parties.



November 4, 2004

Fiscal Year 2004 Reportable Conditions

04-01 Post-Award Monitoring

NSF relies almost exclusively on awardees' representations in their financial expenditure reports to support approximately 90 percent of NSF expenditures, without performing any periodic internal reviews of the expenditure reports. In fiscal year 2004, NSF had a budget of over \$5 billion and managed an estimated 35,000 awards. Post-award administration, especially with respect to financial monitoring, has been a long-standing problem and NSF has not made sufficient progress to effectively address the findings identified to date. We believe NSF's post-award administration structure and resources are inadequate. Management needs to make post-award administration a higher priority, particularly in an age of increased accountability.

In response to a reportable condition identified in the Independent Auditors' Report in prior years, NSF developed the Award Monitoring and Business Assistance Program Guide (Guide) which provided procedures for grantee risk assessments, and on-site visits to ensure among other things that grantee financial management practices are sound. While the Guide represents a significant effort to improve NSF's award monitoring, several concerns remain about the limitations of the risk assessment model, the adequacy of on-site visit procedures and most importantly NSF's ability to provide adequate resources for an effective post-award monitoring program.

NSF's current post-award monitoring program contains the following deficiencies:

- The current risk assessment model determined that only 0.01 percent of NSF awards were high risk. Also, the model does not identify some awards that are known to be high risk.
- The award-monitoring program does not address procedures for both baseline and advanced monitoring depending on the financial risk of the award. Baseline monitoring, which should be completed for all awards, consists of ensuring that administrative award terms and conditions are satisfied, required audit reports are filed, and progress and final reports are received and acted upon as appropriate. Advanced monitoring, which should be performed on high-risk awards provides a more in depth evaluation of award activity including desk reviews and onsite visits.
- On-site visit procedures identified in the Guide are not adequate for the performance of an
 effective on-site review since the procedures in the Guide were streamlined in a manner that
 decreased the effectiveness of the work to be conducted on site-visits. Additionally, the length
 and staffing of the site visits does not allow for thorough reviews of grantees' compliance with
 grant terms and conditions.

In March 2004, a consultant to NSF issued a report titled *Post-award Monitoring Assessment*. The report indicated that while NSF made commendable efforts to develop policies and procedures, it still faces a number of challenges to achieve effective administration. Further, using other grant making agencies as a benchmark, the consultant identified gaps in NSF's post-award administration. NSF has not developed an action plan to address the reported opportunities for improvement.

The NSF Office of Inspector General (NSF OIG) audits continue to disclose noncompliance with federal regulations as well as questioned costs. Two NSF OIG audits that have recently been completed, but not formally issued, questioned approximately \$51 million of costs claimed on these awards, a large portion of which was unauditable due primarily to a lack of accounting records. Such findings demonstrate the increased need for a robust grantee financial monitoring program. Since a significant amount of grants are

not subject to any type of financial monitoring, NSF is exposed to a higher risk that grants are not spent for the purpose originally intended and that expenses reported in the financial statements could be improperly stated.

Recommendations

We believe that a more robust post-award monitoring program is needed. Accordingly, we recommend that the Chief Financial Officer:

- 1. Revise the fiscal year 2005 risk assessment model so that it identifies all known high risk awards:
- 2. Develop and begin implementing a plan for required baseline and advanced monitoring of all grantees;
- 3. Develop a corrective action plan to address the suggestions in the "Overall Assessment Opportunities for Improvement" section in the *Post-award Monitoring Assessment* Report, dated March 2004; and
- 4. Increase the resources dedicated to post-award monitoring. This should include increasing the number of professionals fully focused on post-award monitoring, performing more desk reviews and site reviews, and devoting more time to each site review.

Management's Response

See Exhibit III.

Auditors' Comments

We continue to believe that the lack of an effective post-award monitoring program creates a risk that grant funds are not spent for the purpose originally intended and that expenses reported in the financial statements could be improperly stated. The purpose of this finding is to convey the continuing limitations of the policies and procedures implemented to date. Management has taken little action to our previously issued recommendations. NSF's consultant reported concerns similar to ours in their *Post-award Monitoring Assessment* report, dated March 2004. Further, although the NSF OIG plays a support function in post-award monitoring, the primary responsibility for monitoring grantees rests with NSF. Therefore, we continue to recommend that management take steps as recommended above to strengthen the post-award administration program.

04-02 Contract Monitoring

NSF does not adequately review public vouchers submitted by contractors receiving advance payments to ensure that the reported expenditures are correct and consistent with the contract. Without adequately performing such procedures, misstatements in expenditures may remain undetected. Federal law requires that responsible officials review the public vouchers for accuracy and propriety, correct computations, and authorized purpose under the contractual agreement.

Contractors submit advance requests to NSF's Division of Financial Management (DFM). These advance requests are evaluated by DFM and the contracting officer's technical representative (COTR) to determine whether funds are available. The contractor electronically submits a *Public Voucher for Purchases and Services Other than Personnel* (Public Voucher) on a quarterly basis to DFM. The Public Voucher is supported by project expenditure reports that contain obligation, advance and expense summaries by contract modification and is used to reconcile the amounts advanced to the amounts expended on the

contract. DFM uses the information contained in the public voucher to record expenditures incurred on the contract and to reconcile the expenditures to the outstanding advance payment balance in NSF's records.

NSF limits its review of the Public Voucher to a comparison of the reported quarterly expenditures with the cumulative advance request amount and does not independently assess the validity and accuracy of the reported contractor expenditures. In addition, neither the contracting officer nor the COTR receive copies of Public Vouchers. Without receiving and reviewing this information, NSF officials cannot determine whether the Public Vouchers are factually and mathematically accurate and in accordance with federal law (31 U.S.C. § 3528 (a)). As a result, over \$150 million of annual contract expenditures have not been subjected to an adequate review or approval to determine if these expenditures are appropriate and accurate. In addition, the Public Vouchers do not contain the requisite certification by an official of the contractor's organization stating that the amounts are correct.

Recommendations:

We recommend that the Chief Financial Officer develop procedures to require that:

- 1. Public Vouchers are adequately certified by the contractors' representatives; and
- 2. Public Vouchers are distributed to all responsible officials for review and approval. The review and approval process should include periodic testing of a sample of expenditures to actual invoices/other supporting documentation.

Management's Response

See Exhibit III.

Auditors' Comments

We continue to believe that the lack of adequate reviews over these public vouchers creates the potential for abuse or error and elevates the risk of fraudulent activities occurring without detection. The purpose of this finding is to convey the concern that without regular review of the amounts expended, unauthorized expenditures may take place. These public vouchers support the amounts expended on the contract using the funds that were advanced by NSF and are the only source for the contract expenditures recorded by NSF. Further, the magnitude of contract expenditures incurred by NSF elevates the need for NSF to implement appropriate procedures and controls over these expenditures. Therefore, we continue to recommend that management implement procedures to appropriately review these public vouchers.

Status of FY 2003 Reportable Condition

Post-award Grant Monitoring

NSF continues to need improvement in implementing a comprehensive and systematic risk-based internal grants management program to monitor its post-award phase. Our review of NSF's corrective actions in fiscal year 2004 revealed that NSF needs to fully implement its post-award monitoring procedures, as well as dedicate adequate resources both in terms of additional funding and staffing, before effective monitoring can take place. This is a repeat finding (Finding 04-01) making it the fourth year of reporting post-award grant monitoring as a reportable condition.

Exhibit III

NSF Management's Response to Independent Auditor's Report for Fiscal Year 2004

NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230

November 10, 2004

Thomas M. Cooley

To: Christine C. Boesz

Inspector General

From: Thomas N. Cooley

Chief Financial Officer

Subject: Management's Response to Independent Auditors' Report

Fiscal Year 2004

This memorandum and attachment transmit NSF management's response to KPMG LLP's audit report for fiscal year 2004. We have included detailed responses to the findings as Attachment 1.

SUMMARY

The auditors' report concluded that NSF's financial statements as of and for the years ended September 30, 2004 and 2003 are presented fairly, in all material respects, and are in conformity with generally accepted accounting principles in the United States of America (unqualified opinion). Their consideration of internal control over financial reporting found two reportable conditions: post-award monitoring and contract monitoring. NSF management feels that neither finding establishes a reportable condition – i.e. a significant deficiency that could adversely affect NSF's ability to record, process, summarize, and report financial data.

Reportable Conditions

The auditors' report identified the following as reportable conditions:

 Post-Award Monitoring – NSF's post-award administration structure and resources are inadequate. NSF Management Response: Based on NSF's comprehensive grant administration process, recent improvements to that process, and the auditors' failure to support this finding or their recommendations regarding post-award monitoring, management strenuously disagrees with both the finding and the level assigned to it. Award monitoring is appropriately classified as a management challenge for FY 2005.

 Contract Monitoring – NSF does not adequately review public vouchers submitted under the Antarctic logistical services contract to ensure that the reported expenditures are correct and consistent with the contract.

NSF Management Response: The finding does not support the level of a reportable condition. On an advance-payment contract, such as the Foundation's contract with Raytheon for Antarctic support (the contract reviewed in the course of this year's audit), no payment is made to the contractor based on the submission of a public voucher. The public voucher is merely the vehicle which prompts the reclassification of amounts from advances to expenditures. Multiple controls are in place for overseeing the contract.

NSF management appreciates the cooperation extended by both the OIG and KPMG LLP throughout the audit process. We will continue with our collaborative efforts in maintaining excellence in financial management, and providing the highest quality of business services to our customers and stakeholders.

cc: Dr. Warren M. Washington cc: Dr. Arden L. Bement, Jr.

Attachment 1

Management's Responses to Auditors' Report

Management's Response to 03-01 Post-Award Monitoring

Management strongly objects to the characterization of this as a "repeat finding" as well as its categorization as a reportable condition. Though titled as it has been for the past three years, the substance of the finding and attendant recommendations have changed annually, owing to NSF's substantial progress in strengthening an already robust program of post-award administration.

In the FY 2001 audit, the auditors recommended that NSF establish a risk-based post-award monitoring program. NSF did so the following fiscal year. For FY 2002, the auditors critiqued the program and recommended changes. NSF implemented the changes. In FY 2003, the auditors recommended that increased resources be committed to award monitoring, standardization of review processes, and full implementation of the award-monitoring program. NSF realigned staff and resources, fully implemented the post-award program, and improved policies and procedures.

By continuing to cite the agency's approach to post-award management as a reportable condition, the auditors suggest that the agency's focused investment in this area over the past three years has been of no value.

NSF's Award Administration Enterprise

Over the course of its 54 years, the Foundation had developed a comprehensive, dynamic award administration process. The Foundation's programmatic, financial, and administrative expertise is fully used in NSF's "life-cycle" award administration program -- a program that provides oversight of NSF's investment throughout the course of an award -- from solicitation through closeout.

During the pre-proposal stage, all proposal-generating documents prepared by program staff are reviewed by Budget, Finance, and Award Management (BFA) staff, to ensure consistency with federal and NSF policies governing assistance awards.

The merit review process, internationally recognized as the "gold standard" of scientific peer review, next provides scrutiny of the scientific merit and broader impacts of every potential award. Once a funding action is recommended, BFA staff review the financial and administrative terms of the proposed action. This review ensures that each awardee institution has full notice, within its award documents, of administrative and financial requirements. New awardee

organizations receive additional scrutiny before being deemed eligible to receive and manage federal funds.

Throughout the post-award period, current management controls reasonably ensure that awardees accomplish program objectives; that resources are used consistent with agency mission; that laws and regulations are followed; and that timely information is obtained and maintained. Internal controls provided by information technology systems assure the receipt of final reports from the awardee. Successful progress under prior funding is a key consideration in determining whether to fund a subsequent award.

During the course of an award, NSF program staff monitor technical effort while BFA staff oversee financial and administrative processes, policies, and practices. Large facilities are subject to the oversight processes outlined in the Facilities Management and Oversight Guide that can be found at: http://www.nsf.gov/pubs/2003/nsf03049/nsf03049.pdf, designed specifically for the particular risks presented by large facilities.

In addition, PART, GPRA, and other assessments validate awards at the outcome point. Each of these activities contributes to the Foundation's comprehensive award monitoring program.

Equally important, BFA provides business assistance to awardees, enhancing awardees' understanding of federal requirements. NSF hosts reverse site visits and training events as opportunities for discussing NSF's programmatic, administrative, and financial policies with the awardee community. BFA and other senior NSF staff present NSF policy and guidelines at a variety of annual professional meetings and regional grant conferences.

Audit responsibility resides with the Office of the Inspector General and other cognizant federal agencies. BFA staff manage audit resolution with the awardee and the Office of Inspector General. Unfortunately, audits referred to BFA for resolution too often focus on expired awards. Results from audits of contemporary awards would be more useful as a method of feedback on the effectiveness of our post award administration and more consistent with the complementary roles of the OIG and NSF.

Over the last three years, NSF has aggressively implemented a range of activities that has fortified NSF's ability to mitigate the risk of an awardee expending federal dollars in violation of federal law or policy. These include:

- Creation of a formal Award Monitoring and Business Assistance Program (AMBAP);
- Realignment of the Office of Budget, Finance, and Award Management including the establishment of the Division of Institution and Award Support,

- as well as the more effective deployment of resources in the Divisions of Grants and Agreements and Contracts and Complex Agreements;
- Increased investment of staff and funding in post-award administration;
- Continued enhancement of IT-enabled awards management systems;
- Created a dedicated outreach management position to facilitate communication with the grantee community; and
- Active, award-winning participation in federal-wide efforts to improve accountability and develop responsible, cost-effective eGovernment systems.

From NSF's business assistance efforts and onsite reviews the past two years, NSF has learned that most awardees have adequate systems in place to appropriately manage federal dollars. We have found some shortcomings in the areas of written/consolidated policies and procedures, and cost-sharing allowability and tracking. BFA assists awardees with these areas as well as with establishing indirect cost rates – another area that is challenging to new awardees.

Equally important, since FY 2001 audits of NSF awardees (by the A-133 auditors or by the OIG) have yielded less than \$2 million in disallowed costs per year. This is in the context of award outlays of \$4,310,941,579 for FY2001; \$4,586,255,240 for FY 2002; and, \$5,129,724,220 for FY 2003. These extremely low levels of disallowed costs powerfully demonstrate the effectiveness of NSF's post-award administration.

Notwithstanding the Foundation's significant investment in strengthening award administration over the past three years, and the absence of audit findings demonstrating inadequate award administration, the auditors assert significant deficiencies in the Foundation's award administration internal control that could adversely affect NSF's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements. The Foundation strongly disagrees with the finding, the stated deficiencies and the recommendations.

The finding fails to develop the criteria as prescribed by the General Accountability Office Yellow Book: "criteria are the standards, measures, expectations of what should exist, best practices, and benchmarks against which performance is compared or evaluated." Without criteria, one cannot independently assess whether a deficiency exists much less whether it has been corrected.

Management disputes each of the deficiencies stated in the finding. The above summary of NSF's award administration enterprise, coupled with the below responses to the four recommendations provide management's response to the finding, the deficiencies, and the recommendations.

Recommendation One: Revise the fiscal year 2005 risk assessment model so that it identifies all known high-risk awards.

This recommendation baffles management. If an award is known to be high-risk, one needn't rely on a model to identify the award as high risk. Additionally, by definition, a model is a tool that allows approximate identification of a particular target group – in this case, high-risk awardees. In addition to the model, professional experience and judgment inform a determination of an award's classification as high risk.

Recommendation Two: Develop and begin implementing a plan for required baseline and advanced monitoring of all grantees:

As explained above, NSF employs a comprehensive award administration program. All awardees are subject to the oversight and review of that award administration process. Additional scrutiny and assistance are offered to high-risk awardees.

Recommendation Three: Develop a corrective action plan to address the suggestions in the "Overall Assessment Opportunities for Improvement" section in the Post Award Monitoring Assessment Report, dated March 2004;

In the referenced report, NSF's contractor – IBM Business Consulting Services (IBMBCS) – stated, "Overall, NSF has a sound post-award monitoring program, which provides valuable oversight and assistance to a risk-based sample of institutions." While the consultant identified opportunities for improvement, it also noted, "NSF has begun to pursue many of these opportunities in FY 2004, a promising indication that NSF's post-award monitoring program will improve over time." A corrective action plan is certainly not required for addressing opportunities for improvement identified in an independent report. Management welcomed the input from IBMBCS and will determine whether and when to implement recommended changes.

Recommendation Four: Increase the resources dedicated to post-award monitoring. This should include increasing the number of professionals fully focused on post-award monitoring, performing more desk reviews and site reviews, and devoting more time to each site review.

Recent increases in FTEs have been strategically placed throughout NSF to assist in both pre-award and post-award activities.

NSF management believes strongly that having staff serve in complementary functions brings synergies that would be lost if they were narrowly focused. DIAS is building the Cost Analysis and Audit Resolution Branch (CAAR) specifically to provide leadership and expertise in three complementary functions: Award Monitoring, Cost Analysis and Indirect Costs, and Audit Resolution.

NSF management greatly strengthened the AMBAP Guide during FY 2004 by clearly defining roles and responsibilities, documenting required pre-visit activities and procedures, and clearly delineating core review areas and allowing for targeted reviews based on risk. These review areas are further enhanced by on-site review modules that have five sections as follows: Introduction, Reference Documents, Objective of Review, Areas of Concern, and Detailed Procedures. There are modules for general management, accounting and financial system reviews, time and effort records for personnel, fringe benefits, travel, consultants, cost sharing, participant costs, indirect costs, FCTR reconciliation to the accounting system, procurement, subrecipient monitoring and property. Furthermore, the Guide delineates necessary award documentation that should be reviewed, describes consultation with program officials, delineates expectations for entrance and exit meetings, and has a section on planning for the site visit report. Reports and files have been standardized for consistency of review and reporting.

NSF management strongly believes that the length and staffing of site visits is sufficient to achieve our objectives. These reviews include an on-site component as part of a comprehensive review that actually begins with a desk review prior to the site visit. This desk review enhances the on-site portion of the review because significant analytical work and coordination with Program Officers takes place before the on-site visit begins. These reviews are not intended to be audits and should not be held to the same standards for duration and detail as an audit.

The final paragraph in the audit report that appears just before the recommendations should be removed. Discussing two NSF OIG audits that have not been formally issued is not appropriate. Until the reports are referred to NSF management for resolution and an NSF management decision is made, there is no way to estimate, which questioned costs will be sustained.

Based on NSF's comprehensive award administration process, recent improvements to that process, and the auditors' failure to support a finding or their recommendations regarding post-award administration, management strenuously objects to both the finding as drafted and the level assigned to it. Award administration is appropriately classified as a management challenge for FY 2005.

Management's Response to 03-02 Contract Monitoring

NSF Management disagrees with the finding and the second recommendation. The auditors' statement that over \$150 million of annual contract expenditures have not been subject to review or approval is, at best, misleading.

Although the finding uses the plural "contracts", it is based solely on the examination of the contract for Antarctic logistical services and so our response will focus on that award.

Pursuant to the NSF Act (42 U.S.C. 1870(d)), the Raytheon Technical Services Company LLC, Polar Services (RPSC) contract utilizes advance payments, consistent with the Federal Acquisition Regulation (FAR) clause 52.232-12, Advance Payments. ¹ This FAR clause does not require the use of invoices or vouchers when a letter of credit is utilized. FAR 52.232-12(a) states, "If a letter of credit is used, the Contractor shall withdraw cash only when needed for disbursements acceptable under this contract and report cash disbursements and balances as required by the administrative office."

In accordance with the contract, RPSC receives weekly cash advance drawdowns. The drawdowns are secured by a \$10 million corporate guarantee, which substantially reduces any risk to the U.S. Government. The drawdowns are supported by project reports estimating anticipated costs. The drawdowns are reviewed by the technical, contract and financial offices.

Since drawdown amounts are reviewed, the actual amounts showing on the public voucher that have not been reviewed are only the expenses that were not included in the drawdown request. The average net weekly timing differences (between the cumulative quarterly drawdowns and vouchers) for the four quarterly reports submitted in FY 2004 were \$2,905,538. This amount is at odds with the \$150 million claimed in the finding. Additionally, in only two of the quarters did RPSC expenditures exceed drawdowns.

No payments are made based on the public vouchers submitted by RPSC. The Contracting Officer simply selected the voucher as the accounting mechanism to report cash disbursements and balances, consistent with FAR 52.232-12(a). The public voucher, then, is the accounting vehicle that prompts the reclassification of payments from advances to expenses. Because no payments are made based on these public vouchers as provided in section 3325 of title 31 of the United States Code, the certification requirement in section 3528 (a) is irrelevant.

Submission of the public voucher by an authorized RPSC representative is deemed an electronic certification and signature by DFM. This will be formalized under the contract.

¹ RPSC is one of a small number of contracts in which the agency utilizes advance payments.

The finding describes the DFM process related to contract monitoring but fails to mention the controls in place in both the contracts and technical offices for overseeing contract expenditures.

Copies of RPSC's drawdown requests are sent to the Division of Contract and Complex Agreements (DCCA) and the Office of Polar Programs (OPP). DCCA and OPP review the drawdown for reasonableness based upon knowledge of past and planned expenditures and trends it has observed over time.

Additionally, DFM notifies DCCA, if the quarterly reconciliation reflects costs incurred against a project that has expended all of its funding or against line items known to be complete. DCCA addresses any problem with RPSC, negotiates resolutions, and advises DFM on recording proper expenditures.

Ultimately, DCCA relies on audit activities and reviews to assure that costs incurred are allowable, reasonable, and allocable to the contract. FAR clause 52.216-7, Allowable Costs and Payment, requires an annual cost incurred audit. DCCA has repeatedly requested that our Office of Inspector General (OIG) undertake audits for this contract and is pleased that OIG did agree to start a cost incurred audit in FY 2004. These cost incurred audits are the appropriate mechanism for detecting misstatements in expenditures; expenditures are considered final only after the completion of the incurred cost audit.

Additional controls under the RPSC are provided within DCCA. These include:

- Business System Reviews:
 - → A business systems review addressing RPSC purchasing, property and personnel practices.
 - → A second review addressing RPSC purchasing, accounts payable and personnel compensation practices.
- Subcontract Consent To the extent that NSF has not granted purchasing authority to RPSC, DCCA reviews and must consent to RPSC subcontracts prior to their being awarded.
 - Non-Payment of Subcontractors DCCA is required to review subcontractor assertions of non-payment by RPSC and take action to protect the Government's interests.
 - Annual Program Plan DCCA oversees OPP's efforts to develop the Annual Program Plan in conjunction with RPSC, establishing the contractor's work requirements for each Government fiscal year. DCCA is

also the final approval authority for the Program Plan and any changes thereto.

- Special Program Reviews DCCA supports and participates in special program reviews conducted by OPP (e.g., quarterly SPSE/SPSM reviews, ad hoc medical program review).
- Value Engineering Change Proposals DCCA is responsible for accepting and negotiating any VECP's.
- Subcontracting Plan DCCA administers RPSC's subcontracting plan for this contract.

Additionally, the Office of Polar Programs (OPP) centrally monitors the Raytheon contract and operations. The office monitors the project through a wide variety of methods and techniques. In addition to the COTR, seven OPP Program Officers are responsible for the budget development and oversight of each of the major functional areas of the contract, which includes performance and delivery of tasked services. The monitoring of the contract by OPP provides additional controls over contract expenditures.

- Financial Reporting Financial reporting is supplemented through the Polar Operations Financial Management System (POFMS) through which RPSC reports expenditure information monthly. Additionally, The Deputy Section Head, Polar Research Support, who is also the Contracting Officer's Technical Representative on the NSF/RPSC contract, monitors expenditures through monthly financial status reports submitted by RPSC and through constant, near-daily interaction with RPSC's controller.
- Contractor Performance Video-teleconferences are conducted quarterly between RPSC and OPP personnel to review contractor performance and discuss anticipated activities for the next 90 days.
- Annual Planning Conference A planning conference is held annually to plan for future work and address continuing performance issues.
- Annual Program Plan OPP and RPSC develop the Annual Program Plan, setting forth required work efforts and cost estimates for all activities anticipated for each fiscal year.
- Worksite Oversight OPP assigns personnel (both operational and scientific) to various locations across the geographical area of operations (i.e., McMurdo Station, Amundsen-Scott South Pole Station, Palmer Station, and Christchurch, NZ) to oversee RPSC activities.

- Performance Evaluation OPP annually evaluates the contractor's performance via an extensive list of performance metrics that are reviewed and updated annually. This makes up 75% of the performance score. The balance is a qualitative assessment of project management, and innovation. The total score is used to determine the contractor's annual fee.
- Engineering Support To oversight more technical aspects of construction and engineering, OPP teams with other Federal agencies such as the Pacific Division (PACDIV) of the Naval Facilities Command and the Cold Regions Research and Engineering Laboratory of the Army Corps of Engineers to provide architectural, and engineering expertise to oversight design, and construction.
- Construction Inspection On-site inspection of construction is done via a Title II inspector reporting to NSF via PACDIV.
- Project Feedback Each science project supported in the field is debriefed at the completion of the field portion of their project and therefore provides their assessment to OPP of the support received from RPSC.
- Program Reviews OPP conducts regular program reviews for projects of greatest significance (e.g., SPSE/SPSM and IceCube), and ad hoc program reviews addressing other contract performance matters (e.g., medical program) as required. Earned Value Management techniques are employed for projects that require significant budgetary resources.

Management disagrees with the contract monitoring finding and the second recommendation. Controls over expenditures are in place at the time of drawdown and through the term of the contract. The annual incurred cost audit is the appropriate mechanism for testing of expenditures against supporting documentation.